DOCUMENT RESUME

ED 304 818 EC 212 508

AUTHOR	Rusch, Frank R.; DeStefano, Lizanne
TITLE	Secondary/Transition Intervention Effectiveness: Third Annual Report.
INSTITUTION	Illinois Univ., Champaign. Secondary Transition Intervention Effectiveness Inst.
SPONS AGENCY	Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE	88
CONTRACT	300-85-0160
NOTE	285p.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC12 Plus Postage.
DESCRIPTORS	Databases; *Disabilities; *Education Work Relationship; Employer Attitudes; Employment; Federal Programs; Graduate Study; Intervention; Job Placement; Parent Participation; *Program Effectiveness; Public Policy; *Research Projects; Secondary Education; Social Environment; Student Evaluation; Teaching Methods; Technical Assistance; *Transitional Programs
IDENTIFIERS	Competitive Employment (Disabled)

ABSTRACT

The Secondary Transition Intervention Effectiveness Institute studies issues related to secondary education and transitional services for individuals with special needs. This third annual report offers an overview of secondary transitional services in the United States by Jane Dowling. Papers describing preliminary findings of the Institute's third year research projects are presented: "Social Ecology of the Workplace" (Janis Chadsey-Rusch); "Co-worker Mediated Intervention Strategies" (Frank Rusch); "Employer Perceptions of Hiring Individuals with Disabilities" (Adelle Renzaglia); "Federal Policy Affecting Transition: A Value-Critical Analysis" (Lizanne DeStefano); "Successful and Unsuccessful Placement of Secondary Students into Competitive Employment" (Laird Heal); "Secondary Analyses of Educational and Transitional Services" (Delwyn Harnisch); and "Changes in Aim and Activity During Transition Project Operations" (Robert Stake). The Institute's activities and plans are described for the following task areas: literature review, annual meeting, communication, technical assistance, model program database, experience for graduate students, and performance management system. Also provided are summaries of activities and plans for the conduct of research projects on: workplace social ecology, co-worker involvement, instructional strategies, parents in the transition process, assessing and facilitating employers' positive acceptance of employees with handicaps, policy analysis, meta-evaluation, characteristics of projects that endure after federal funding ceases, student assessment, analysis of extant data sets, and evaluation approaches. (JDD)

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Annual Report
1988

Frank R. Rusch

TRANSITION
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The following principles guide our research related to the education and employment of youth and adults with specialized education, training, employment, and adjustment needs.

- Individuals have a basic right to be educated and to work in the environment that least restricts their right to learn and interact with other students and persons who are not handicapped.
- Individuals with varied abilities, social backgrounds, aptitudes, and learning styles must have equal access and opportunity to engage in education and work, and life-long learning.
- Educational experiences must be planned, delivered, and evaluated based upon the unique abilities, social backgrounds, and learning styles of the individual.
- Agencies, organizations, and individuals from a broad array of disciplines and professional fields must effectively and systematically coordinate their efforts to meet individual education and employment needs.
- Individuals grow and mature throughout their lives requiring varying levels and types of educational and employment support.
- The capability of an individual to obtain and hold meaningful and productive employment is important to the individual's quality of life.
- Parents, advocates, and friends form a vitally important social network that is an instrumental aspect of education, transition to employment, and continuing employment.

The Secondary Transition Intervention Effectiveness Institute is funded through the Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education (contract number 300-85-0160).

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Secondary/Transition Intervention
Effectiveness: Third Annual Report

1988

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TABLE OF CONTENTS

Purpose of the Institute 1
Overview of Secondary Transitional Services in the United States -- Jane Dowling 3

Part One. Preliminary Findings (Year 3)

1. Social Ecology of the Workplace -- Janis Chadsey-Rusch. 25

2. Co-worker Mediated Intervention Strategies (Co-worker Involvement) -- Frank Rusch 42

3. Employer Perceptions of Hiring Individuals with Disabilities -- Adelle Renzaglia. 68

4. Federal Policy Affecting Transition: A Value-Critical Analysis -- Lizanne DeStefano 90

5. Successful and Unsuccessful Placement of Secondary Students into Competitive Employment -- Laird Heal 108

6. Secondary Analyses of Educational and Transitional Services -- Delwyn Harnisch 125

7. Changes in Aim and Activity During Transition Project Operations -- Robert Stake 147

Part Two. Introduction to Tasks and Activities for Year 4 (months 37-48)

TASK 1 -- Literature Review (Lynda Leach) 163

- Summary of Year 3 Activities 163
- Overview of Year 4 Activities 163
- Management Plan for Year 4 164

TASK 2 -- Annual Meeting (Dr. Janis Chadsey-Rusch) 165

- Summary of Year 3 Activities 165
- Overview of Year 4 Activities 166
- Management Plan for Year 4 168

TASK 3 -- Communication (Merle Levy and Cindy Dobbs) 169

- Summary of Year 3 Activities 169
- Overview of Year 4 Activities 170
- Management Plan for Year 4 171

TASK 4.1 -- Social Ecology of the Workplace (Dr. Janis Chadsey-Rusch) 172

- Overview of Year 4 Activities 172
- Management Plan for Year 4 174

TASK 4.2 -- Co-worker Involvement Research Program (Dr. Frank Rusch). 175

Overview of Year 4 Activities 175
Management Plan for Year 4 178

TASK 4.3 -- Instructional Strategies Research Program (Dr. James Halle) 179

Summary of Year 3 Activities 179

TASK 4.4 -- Parents of Young Persons with Handicaps in the Transition Process (Dr. Francesca Lundstrom) 180

Summary of Year 1 Activities 194
Preliminary and Tentative Findings from Initial Interviews 196
Management Plan for Year 4 205

TASK 4.5 -- Assessing and Facilitating Employer's Positive Acceptance of Employees with Handicaps (Dr. Adelle Renzaglia) 206

Overview of Year 4 Activities 206
Management Plan for Year 4 207

TASK 4.6 -- Policy Analysis (Dr. Lizanne DeStefano) 208

Overview of Year 4 Activities 208
Management Plan for Year 4 211

TASK 5 -- Technical Assistance (Dr. Jane Dowling) 212

Summary of Year 3 Activities 212
Management Plan for Year 4 223

TASK 6.1 -- Model Program Data Base (Dr. Jane Dowling) 225

Summary of Year 3 Activities 225
Major Findings 227
Year 3 Products 231
Management Plan for Year 4 239

TASK 6.2 -- Meta-evaluation (Dr. Laird Heal) 240

Overview of Year 4 Activities 240
Management Plan for Year 4 241

TASK 6.2 (continued) -- Enduring Qualities, Persistent Projects: Characteristics of Projects that Endure after Federal Federal Funding Ceases (Dr. Frank Rusch) 242

Management Plan for Year 4 248

TASK 6.3 -- Student Assessment (Dr. Lizanne DeStefano) 249

Overview of Year 4 Activities 249
Management Plan for Year 4 250

TASK 6.4 -- Analysis of Extant Data Sets (Dr. Delwyn Harnisch) 251

Overview of Year 4 Activities 251
Management Plan for Year 4 254

TASK 6.5 -- Research on Evaluation Approaches (Dr. Robert Stake) 255

Summary of Year 3 Activities 255
Year 3 Product 260
Graduate Student Involvement 260
Overview of Year 4 Activities 260
Management Plan for Year 4 262

TASK 7 -- Experience for Graduate Students (Dr. Frank Rusch) 263

Summary of Year 3 Activities 263
Overview of Year 4 Activities 264
Management Plan for Year 4 265

TASK 8 -- Performance Measurement System (Dr. Frank Rusch) 268

Summary of Year 3 Activities 268
Overview of Year 4 Activities 270
Management Plan for Year 4 271

Purpose of the Institute

The economic, educational, and employment problems encountered by youth and adults with handicapping conditions have been addressed in the past through a variety of federal and state programs. Assurances of nondiscrimination, mandated services, and equal access to services have earmarked federal legislation through the years; however, only recently has Congress elected to focus directly on the transition from school to work for these individuals. In the 1983 Amendments to the Education for All Handicapped Act of 1973, Section 626 of Public Law 98-199, entitled "Secondary Education and Transitional Services for Handicapped Youth," was enacted for the purpose of stimulating a nationwide Transition Initiative. Under the leadership of Assistant Secretary Madeleine C. Will, the Transition Initiative became a national priority. The impetus for the Initiative was the authorization of $6.6 million in grants and contracts to be awarded annually by the Office of Special Education and Rehabilitative Services (OSERS).

With the major objectives of Section 626 being to improve and develop secondary special education programs and to strengthen and coordinate education, training, and related services to assist in the transition process, OSERS announced several grant programs in fiscal year 1984. In addition to Section 626, grant programs were also authorized under Section 641 - 642 of Public Law 98-199 and Section 311 (A)(1) of Public Law 93-112, Rehabilitation Act of 1973, as amended. Fiscal year 1984 marked the beginning of a federal effort to focus on the problems of youth with handicapping conditions exiting the secondary school and to provide appropriate transition services at all levels for youth and adults with handicapping conditions.

In order to assist in evaluating and extending the impact of the federal initiative, the Secondary Transition Intervention Effectiveness Institute at the University of Illinois at Urbana-Champaign was formed in August 1985. Through a five-year contract with OSERS, the Transition Institute at Illinois is studying the issues and problems related to secondary education and transitional services.

Overview of Secondary Transitional Services in the United States

Jane Dowling

Since 1984, 180 model demonstration projects have developed and implemented a wide range of service delivery models focused on facilitating the transition of youth/adults with handicapping conditions. Figure 1 provides a general comparison of the current grant competitions, and Figure 2 presents the geographical distribution of these 76 current projects. Figure 3 provides an overview of the 104 expired projects across eight competitions. To illustrate the impact of project activities on transition as a national priority, the geographical distribution of both expired and current projects (as of January 1, 1988) is presented in Figure 4.

Project services are provided in major metropolitan areas, suburbs, small towns, and rural areas. In addition, some models are designed to provide countywide, statewide, or nationwide services. Table 1 shows a breakdown of the type of political unit served by projects in the current competitions. Approximately 40% of the projects are located in major metropolitan areas, and at least 20% of the projects are providing statewide services. An analysis of the political units served by all projects funded since 1984 indicates an estimated 41% of all the projects have provided services to either regions within a state or on a statewide basis. Approximately 30% of all the projects have served major metropolitan areas.

The youth and adults receiving services through the projects exhibit a range of handicapping conditions. Due to the priorities of certain competitions (i.e., 84.078C and 84.078B), some projects have targeted specific handicapping conditions. Of those youth currently being served by

Figure 1

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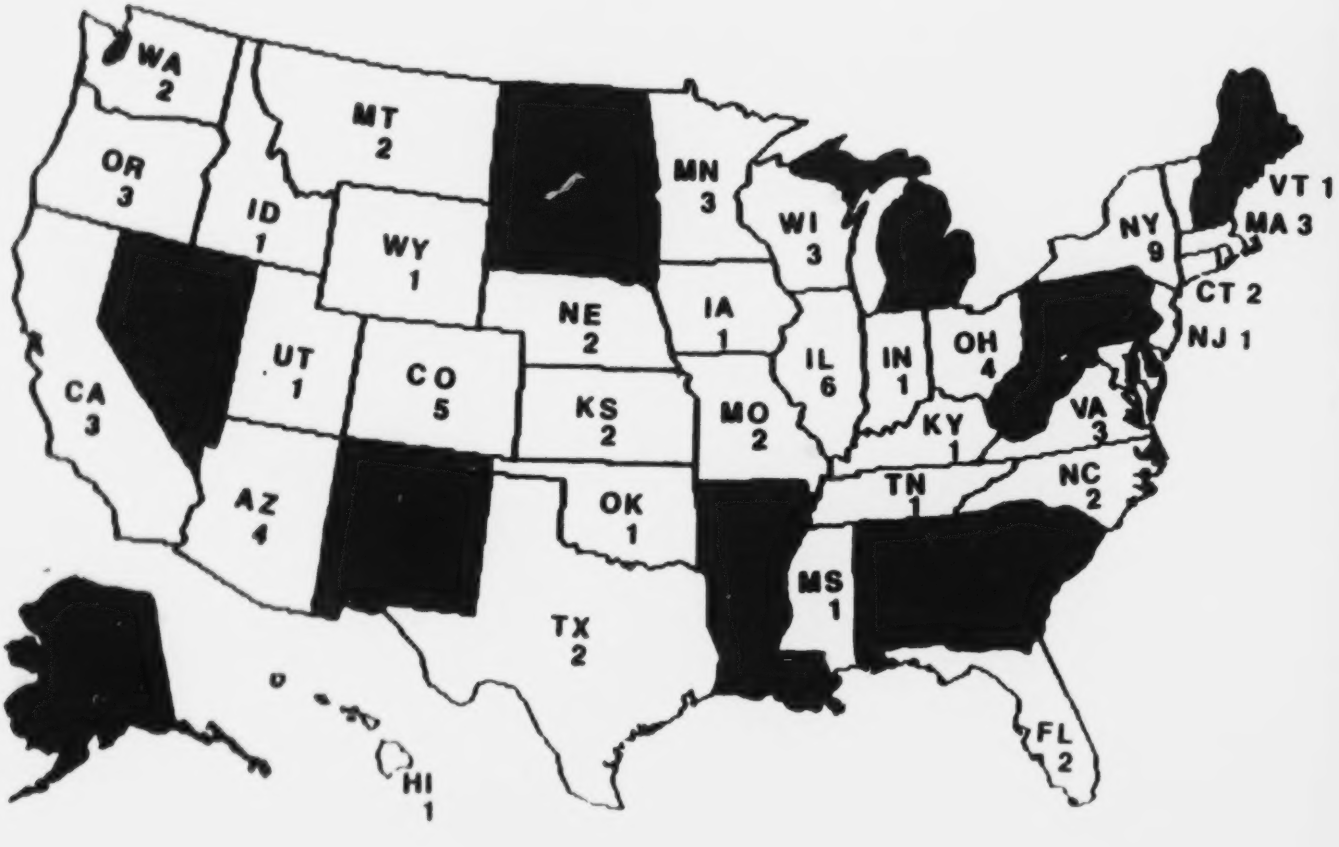
CURRENT TRANSITION PROJECTS

PROJECT COMPETITION	84.086M	84.158C	84.158L	84.078C
TYPE OF PROJECT	Innovative Programs: Transition Skills Development	Cooperative Models for Planning and Development	Secondary/Transitional Service Models	Postsecondary Demonstration Projects
TARGET POPULATION	Severe Handicapping Conditions Including Deaf-Blind	All Handicapping Conditions	Learning Disabilities & Other Mild Handicapping Conditions	FY85: All Handicapping Conditions FY86/FY87: Learning Disabilities
NUMBER OF GRANTS FUNDED	11 (1 expired)	38 (16 expired)	10	47 (13 expired)
FUNDING PERIOD	FY86: 3 Years Annual Review	FY85: 2 Years FY86: 3 Years FY87: 3 Years Annual Review	FY87: Up to 3 Years Annual Review	FY85: 2 & 3 Years FY86: 2 & 3 Years FY87: 1, 2 & 3 Years Annual Review
EXPIRATION	1989	1987, 1989, 1990	1990	1986 - 1990
FOCUS OF CURRENT PROJECT ACTIVITIES	Product Development/Revision Social and Independent Living Skill Training Job Development/Placement Parent/Staff Training Vocational/Employment Training Community-Based Training Parent Education Transition Model Development Replication Inservice Training Program Evaluation Systems Development Followup Dissemination Field Test Models On the Job Training	Product Development Agency Coordination Inservice Training Curriculum Development/Revision Technical Assistance/Consult Program Evaluation Board/Council Establishment Dissemination Parent/Community Workshops ITP Development/Planning Baseline Data Collection Field Test Model Tracking System Development Replication Instrument Development Supported Employment Policy Recommendations Transition Team Development	Curriculum/Course Development and Refinement Data Collection Placement/Followup Support Services Development/ Refinement Diagnosis/Assessment Site Development Instrument Development Field Test Model Program Interagency Linkage Development Skill Training Package Development 13th Year Program Inservice/Staff Training Evaluation Plan Development/ Refinement Technical Assistance/Consult	Inservice Training Product Development Curriculum Development/Revision Dissemination Educational Skills/Learning Strategy Development Program Evaluation Computer Assisted Instruction Support Service Development/ Maintenance Followup/Tracking Technical Assistance Assessment Conduct Research Summer Program Development Adaptive Instruction Replication/Continuation Writing Skill Training

Figure 2. Geographical Distribution of Current Projects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MO 2
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VA 3
AZ 4
OK 1
TN 1
NC 2
MS 1
TX 2
FL 2
HI 1

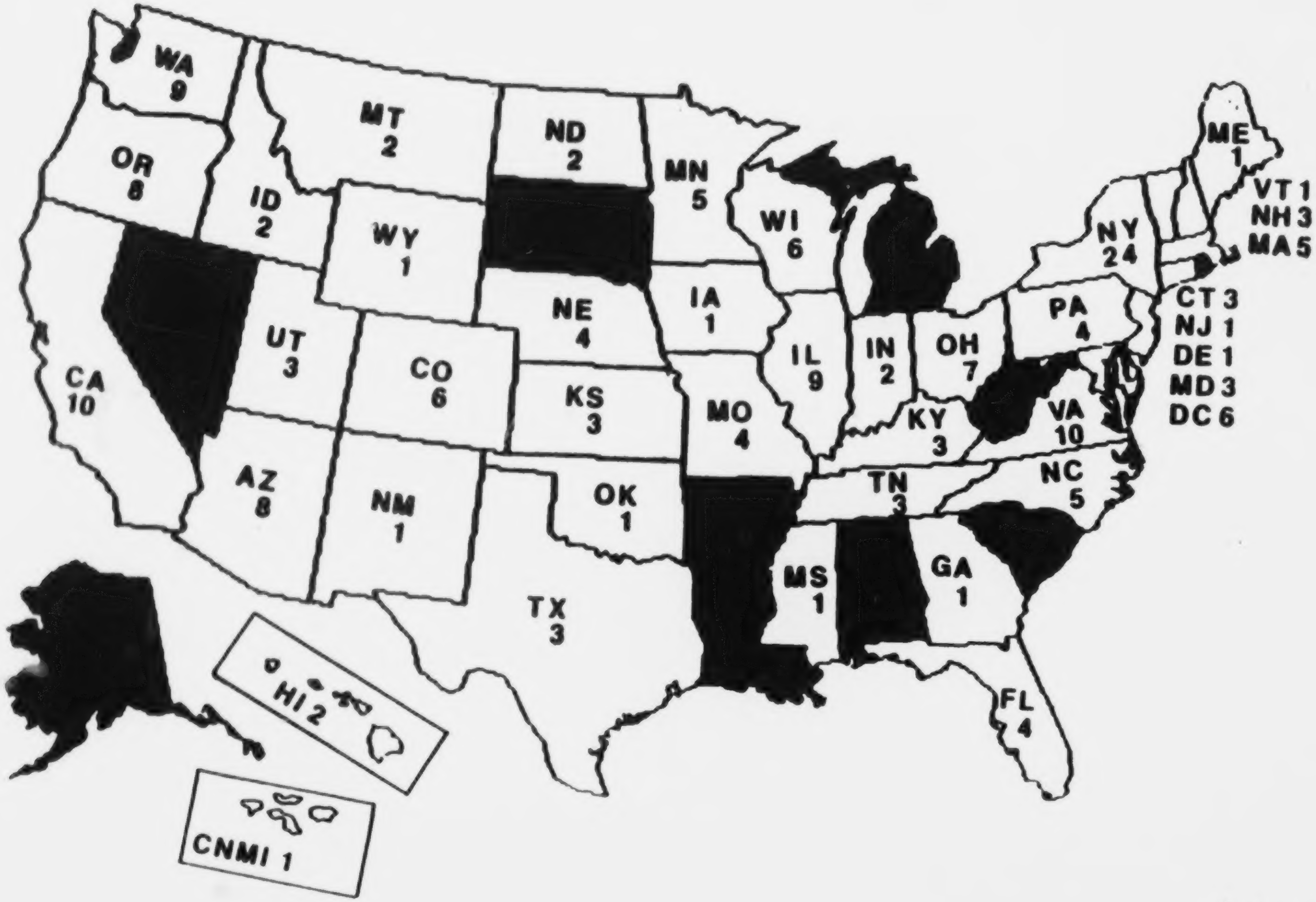
Figure 3

EXPIRED TRANSITION PROJECTS

PROJECT COMPETITION	84.158B	84.158C	84.023D	84.023G
TYPE OF PROJECT	Cooperative Models for Planning and Developing Transitional Services	Cooperative Models for Planning and Development	Model Demonstration: Youth Employment Projects	Postsecondary Model Demonstrations
TARGET POPULATION	All Handicapping Conditions	All Handicapping Conditions	All Handicapping Conditions	All Handicapping Conditions
NUMBER OF EXPIRED PROJECTS	11	16	12	15
YEAR OF EXPIRATION	1986	1987	1987	1987
PROJECT COMPONENTS BEING CONTINUED	Product Dissemination Transition Planning Manpower Training Agency Coordination	Student/Client Training Assessment Placement and Followup Student/Client Education Product Dissemination Agency Coordination Identification of Employers/ and Business Sites Provision of Transitional/ Employment Services Provision of Support Services	Replication Student/Client Education and Training Assessment Technical Assistance Product Dissemination Student/Client Placement Counseling Inservice Training Student/Client Referral Agency Coordination	Agency Coordination Assessment Student/Client Referral Followup/Tracking Student/Client Placement Product Dissemination Student/Client Education Intake/Eligibility Determination Student/Client Training Program Refinement/Revision Applied Research

PROJECT COMPETITION	84.078C	84.158A	84.128A	84.078B
TYPE OF PROJECT	Postsecondary Demonstration Projects	Secondary/Transitional Service Demonstration Models	Special Projects Providing Vocational Rehabilitation	Postsecondary Demonstration Projects
TARGET POPULATION	FY85: All Handicapping Conditions FY86: Learning Disabilities	All Handicapping Conditions	Severe Handicapping Conditions	Mild Mental Retardation and Learning Disabilities
NUMBER OF EXPIRED PROJECTS	13	16	5	15
YEARS OF EXPIRATION	1986 & 1987	1987	1987	1987
PROJECT COMPONENTS BEING CONTINUED	Student/Client Training and Education Intake/Eligibility Determination Assessment Product Dissemination Agency Coordination Counseling Student/Client Referral Placement Followup Program Refinement/Revision Summer Program Maintenance	Student/Client Placement Student/Client Intake Agency Coordination Followup Product Dissemination Program Refinement/Revision Student/Client Training Assessment Transition Planning Support Services	Followup Student/Client Training Assessment Placement	Student/Client Training Assessment Intake/Eligibility Determination Followup Student/Client Referral Placement Student/Client Education Manpower Training Counseling Program Refinement/Revision

Figure 4. Geographical Distribution of Expired and Current Projects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DC 6
WY 1
CA 10
UT 3
CO 6
NE 4
IA 1
IL 9
IN 2
OH 7
PA 4
KS 3
MO 4
KY 3
VA 10
OK 1
TN 3
NC 5
AZ 8
NM 1
TX 3
MS 1
GA 1
FL 4
HI 2
CNMI 1

Table 1

Percentage$^+$ of Projects Serving Specific Political Units

	COMPETITION #					
	84.078C N=34	84.086M N=10	84.158C N=22	84.158L N=10	All N=76	TOTAL N=180
TYPE OF POLITICAL UNIT						
Metropolitan area (100,000+) with public transportation	50	40	9	70	39	29
Metropolitan area (100,000+) with no public transportation	0	0	0	0	0	1
Suburb of a metropolitan area	3	0	5	0	3	4
Small town (5,000-100,000) with public transportation	3	0	14	0	5	3
Small town (5,000-100,000) with no public transportation	3	0	0	10	3	1
Rural area	3	0	18	10	8	5
Part of a county	6	10	0	0	4	4
County	0	10	14	0	5	8
Region within a state (including more than one county)	29	10	18	20	22	17
State	12	30	41	0	21	24
Region of nation (more than one state)	6	0	0	0	3	3
Nationwide	0	0	0	0	0	4
Other	6	0	0	0	3	4

N = Number of projects reporting
+ = Percentages were calculated by rounding and may not add up to 100%

projects, more than one half have a learning disability and approximately 20% have either a diagnosis of mental retardation or a developmental disability. Other handicapping conditions were reported by projects; however, overall incidences were often less than 10%. Projects were asked to estimate the impact of their project, directly and indirectly, on youth and adults with handicapping conditions. The number of youth/adults being impacted by the current model projects is estimated at 67,656, whereas the estimated number receiving direct services is 11,971. To date, it is estimated that 127,790 youth with handicapping conditions have been impacted by the model demonstration transition projects and approximately 22,567 youth have been receiving direct services. Current projects were asked to report the total number of youth receiving direct services by specific handicapping conditions. Table 2 presents the percentage of youth/adults with specific handicapping conditions receiving direct services as indicated by those projects reporting on specific handicapping conditions. The "total" column in Table 2 reflects the estimated percentage of youth by specific handicapping condition served since the funding of the first model demonstration projects.

While the target population varies among grant competitions, the majority of projects are offering related service components to parents, teachers, agency personnel, business/industry personnel, and other service providers. Over 90% of the projects reported the provision of some type of related service or training. Across the current competitions, related services/training are reportedly being provided to approximately 2,300 parents, 1,025 agency personnel, and 4,000 teachers. Table 3 presents an overview of the various groups receiving related services from the current

Table 2

Percentage+ of Youth/Adults Served in Individual Competitions

by Specific Handicapping Condition

	COMPETITION #					
	84.078C N=2920	84.086M N=629	84.158C N=3670	84.158L N=1461	All N=8680	TOTAL N=18877
HANDICAPPING CONDITION						
Autism	0	4	8	0	1	1
Behavioral disorder	1	0	1	0	1	2
Brain damage	1	0	1	0	1	1
Cerebral palsy	2	3	1	0	1	1
Chronic mental illness	1	17	1	5	2	2
Communication disorder	1	1	1	0	1	1
Deaf-blind	0	2	1	0	1	1
Developmental disability	1	22	3	0	3	3
Emotional disorder	1	1	16	1	7	4
Epilepsy	1	1	1	0	1	1
Health impairment	1	0	1	0	1	1
Hearing impairment	1	4	3	2	2	2
Learning disability	85	0	30	83	55	52
Mental retardation	2	32	33	6	18	23
Multiple handicap	1	12	2	1	2	1
Physical handicap	3	1	3	2	3	3
Speech impairment	1	0	2	0	1	1
Spinal cord injury	2	0	1	0	1	1
Traumatic head injury	1	0	1	0	1	1
Visual impairment	1	1	1	0	1	1
Other	1	1	0	0	1	2

N = Number of youth receiving direct services as reported by specific handicapping condition.
+ = Percentages were calculated by rounding and may not add up to 100%.

Table 3

Number of Individuals Participating in Related Service Components by Individual Competition

	COMPETITION #					
	84.078C N=32	84.086M N=10	84.158C N=20	84.158L N=8	All N=70	TOTAL N=149
CATEGORY OF PARTICIPANTS						
Parents	486	446	1100	340	2372	4689
Secondary Teachers	2924	158	792	161	4035	8262
Agency Personnel	360	238	402	26	1026	2524
Project Staff	104	50	30	17	201	507
Business/Industry Personnel	280	70	1196	200	1746	2581
Postsecondary Faculty	923	0	21	5	949	2906
Peer Tutors	77	0	0	0	77	124
Undergraduate/Graduates	507	0	288	13	808	1143
Other	64	5	177	20	266	1340

N = Number of projects reporting actual numbers receiving related services.

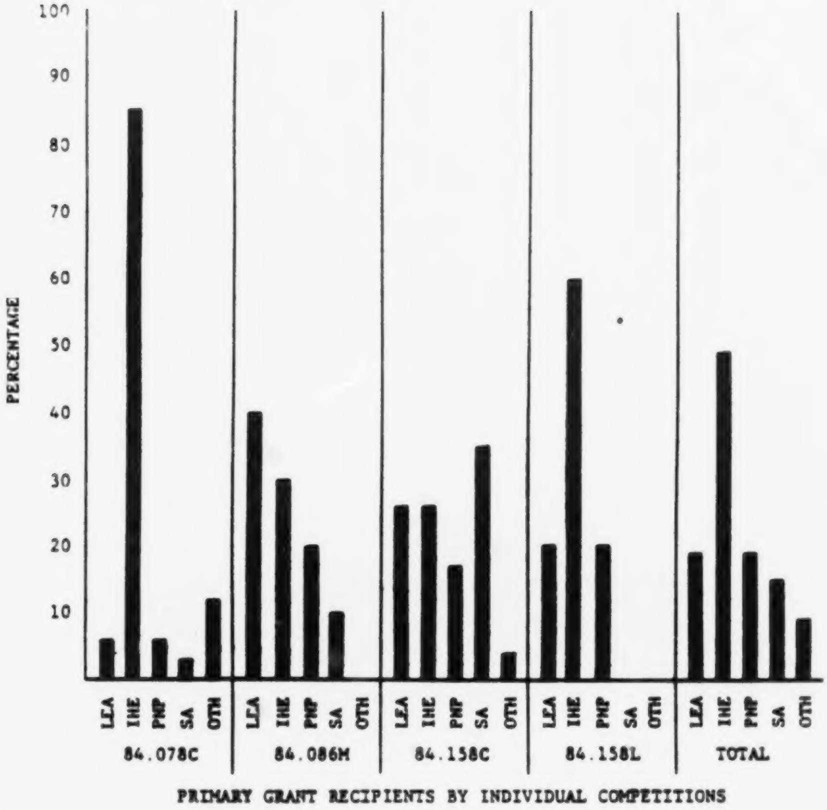
Table 4

Percentage of Projects in Current Competitions

Reporting Cooperation with Specific Agencies

	COMPETITION #				
	84.078C N=22	84.086M N=9	84.158C N=22	84.158L N=9	All N=62
AGENCY TYPE					
Public Secondary School	41	33	32	56	39
Private Secondary School	5	0	9	0	5
Local Education Agency	9	44	36	44	29
Community College	50	0	32	44	35
University	14	11	36	11	21
JTPA Agent	9	33	45	22	27
Residential Institution	0	22	23	11	13
Community Workshop	0	22	36	11	18
Community Education/Rehabilitation Facility	15	11	23	22	15
Profit Making Agency	29	33	23	33	21
Research Institute	0	11	5	0	3
City/County Government	0	11	18	0	8
State Agency	59	89	64	56	65
Private Non-Profit Agency	9	22	18	0	13
Local ARC	0	33	18	0	11
Local ACLD	18	0	9	11	11
Hospital	0	0	5	0	2
Other	27	44	32	33	32

N = Number of projects reporting.



LEGEND:

LEA = Local education agency
IHE = Institution of higher education
PNP = Private non-profit agency
SA = State agency
OTH = Other

Figure 5. Percentage of Primary Grant Recipients

competitions as well as a total comparison of related services provided to the groups to date.

Eligible recipients of current grant awards are specified for each competition. The most common grant recipients were institutions of higher education followed by state agencies, private non-profit agencies, and local education agencies. Figure 5 indicates the type of primary grantee for each current competition and an overview of the total percentage of primary grant recipients to date.

A major intent of the transition initiative has been the development of collaborative relationships among agencies. Some grant competitions prioritized the development of cooperative models. Table 4 presents the percentage of current projects indicating cooperation with another agency. The majority of those reporting projects (65%) are cooperating with a state agency. Of those state agencies reported, over one-half were state vocational rehabilitation agencies.

In the Rules and Regulations published for each grant announcement, applicants are directed to "show methods of evaluation that are appropriate for the project and, to the extent possible, are objective and produce data that are quantifiable." In order to address this directive, the majority of projects reported using a systems analysis approach to assess the effectiveness and efficiency of their model programs. Several projects reported using systems analysis in combination with other approaches, primarily a goal based approach. One-third of the projects also reported the use of decision making, professional review, and case study as supplemental approaches. Table 5 presents a breakdown of the various evaluation approaches being utilized by the projects in current competitions as well as

Table 5

Percentage of Projects in Individual Competitions

Using Specific Evaluation Approaches

	COMPETITION #					
	84.078C N=34	84.086M N=10	84.158C N=22	84.158L N=10	All N=76	TOTAL N=160
EVALUATION APPROACH						
Systems Analysis	71	80	77	80	75	72
Goal Based	59	50	73	50	61	55
Goal Free	12	30	14	0	13	13
Decision Making	26	20	45	30	32	28
Connoisseurship	0	0	0	0	0	2
Professional Review	35	40	27	20	32	30
Quasi Legal	0	0	0	0	0	0
Case Study	24	30	14	30	32	28

N = Number of projects reporting.

Table 6

Percentage of Projects in Individual Competitions

Collecting Specific Data/Information

	COMPETITION #					
	84.078C N=33	84.086M N=10	84.158C N=21	84.158L N=10	All N=74	TOTAL N=156
TYPE OF DATA/INFORMATION						
Information on Students/Clients Served						
Number referred to project services	82	70	52	70	70	71
Intake/referral information	55	40	38	70	50	54
Number receiving direct services	79	70	81	80	78	81
Student demographics	79	80	71	60	74	81
Student educational background	67	50	43	50	55	58
Student work experience background	67	60	67	50	64	56
Assessment results for student	73	80	48	80	68	71
Student progress in training program	42	10	57	10	62	61
Student progress in educational program	73	80	43	70	65	59
Student integration into environment	27	80	57	50	46	44
Student follow-up status	67	80	33	80	61	73
Student employment status	36	70	71	70	55	69
Student outcome status	48	50	62	70	55	51
Other student information	21	10	10	30	18	17
Information on Employers						
Employer characteristics/demographics	18	70	48	60	39	41
Employer collaboration level	12	60	29	30	26	22
Level of direct service provided to employer	9	70	43	30	30	33
Employer satisfaction with student	21	70	57	60	43	44
Employer outcome status	6	60	33	40	39	22
Other employer data/information	0	0	10	10	4	6
Information on Postsecondary Education						
Postsecondary education/training demographics	42	30	38	60	42	40
Postsecondary education/training collaboration level	27	10	33	40	28	28
Level of direct service provided by project	64	10	38	40	55	40
Postsecondary education/training satisfaction with student participation, etc.	52	20	24	40	38	28
Postsecondary education/training outcomes	64	20	33	50	47	36
Other postsecondary information	21	0	5	10	12	10

N = Number of projects reporting.

Table 7

Percentage of Projects in Individual Competitions

Using Specific Types of Instrumentation

	COMPETITION #				
	84.078C N=27	84.086M N=5	84.158C N=8	84.158L N=7	All N=47
COMMERCIAL INSTRUMENTS					
General Ability/Intelligence	78	40	75	29	66
Special Aptitude	4	20	63	14	17
Vocational Skills	22	20	75	43	34
Academic Achievement	78	20	75	86	72
Language	26	20	63	14	30
Adaptive Behavior/Survival Skills	19	60	75	14	32
Social Skills	15	20	50	57	28
Career Interest	52	0	63	71	51
Daily Living Skills	7	40	50	57	26
Dexterity/Manual Skills	11	0	50	57	23
Other Student Assessment	41	60	38	0	36
LOCAL/PROJECT DEVELOPED					
Observation Forms	29	56	33	13	32
Checklists	45	44	39	25	41
Rating Scales	52	44	61	38	52
Interviews	55	33	28	88	48
Surveys	58	44	83	63	64
Questionnaires	32	0	28	38	27
Other	61	78	61	88	67

N = Number of projects reporting.

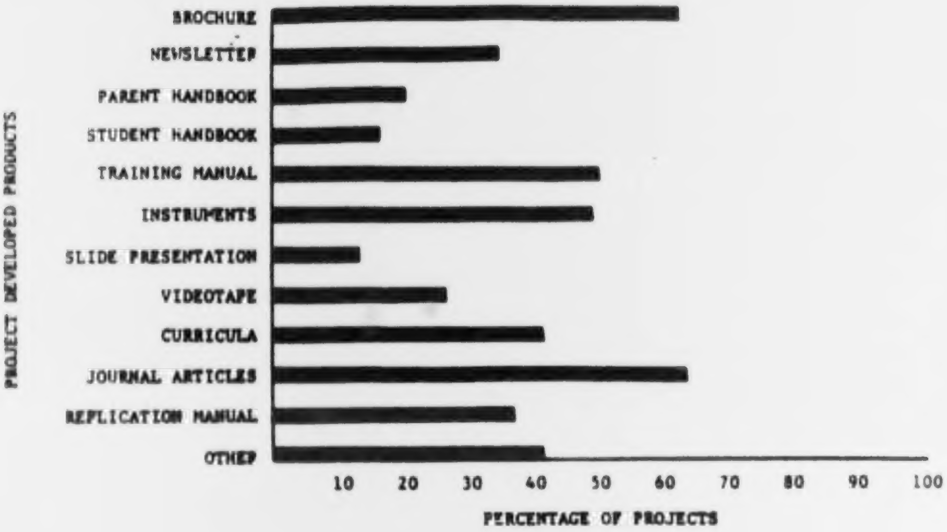


Figure 6. Percentage of Projects Developing Specific Products

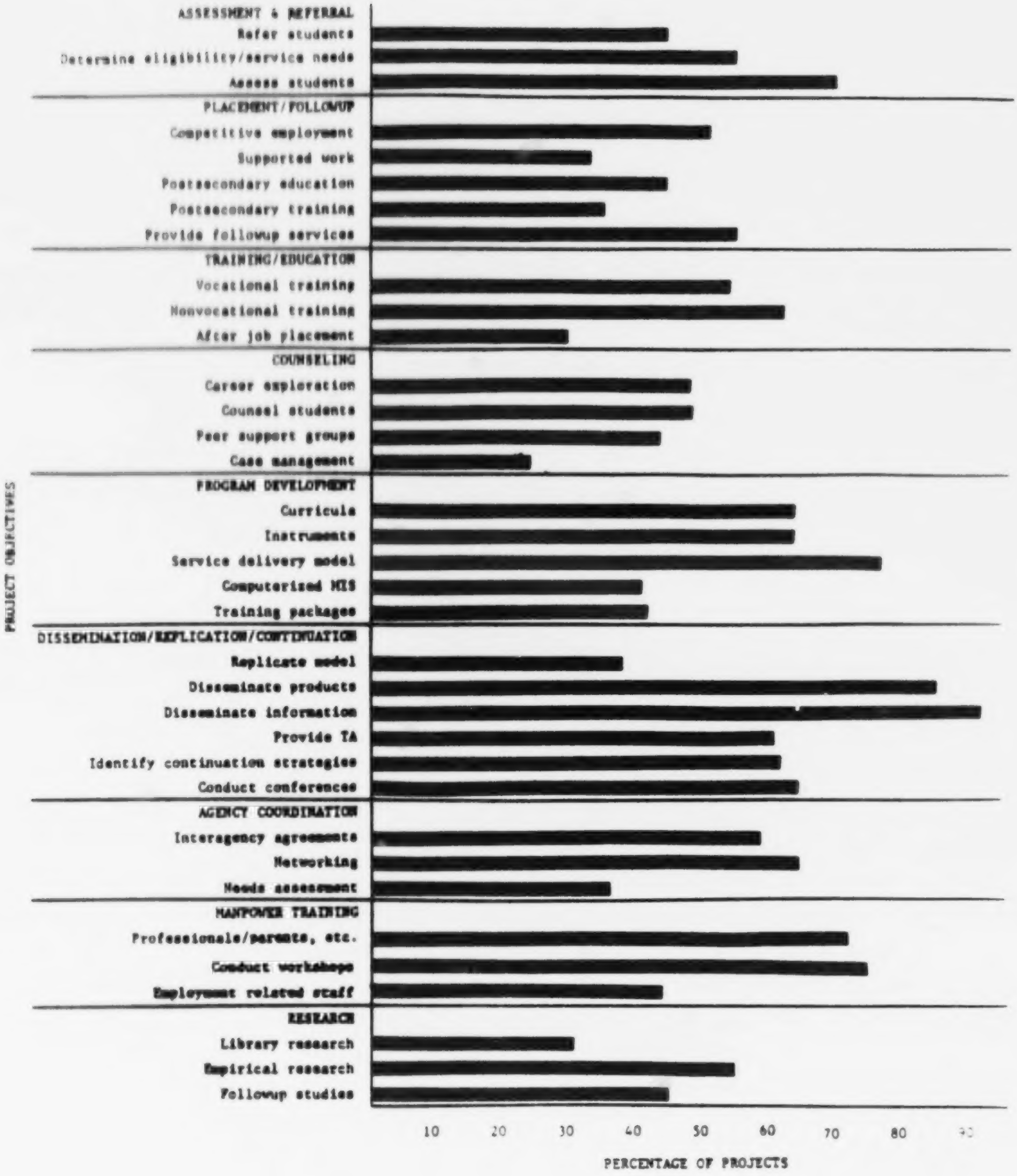


Figure 7. Percentage of Projects Practicing Objectives

a summary total for projects funded to date that have reported on an evaluation approach.

The type of evaluation data/information being collected by projects varies with the priorities of each competition. Again, the focus on quantifiable evaluation data is apparent across all projects. Table 6 indicates the type of evaluation data/information being collected in each current competition and the percentage of projects reporting the collection of specific evaluation data and information to date.

A variety of commercially available and project-developed instruments are being used by projects to collect evaluation information on student/client and to assess specific competency areas. Commercial instruments used to assess academic achievement were most frequently reported by the currently funded projects. Instruments used to assess general ability/intelligence and career interest are being used by approximately one-half of the current projects. At least one-half of the projects reported use of project/locally developed instruments to collect evaluation information on student/client and program. Table 7 presents the type of commercial and locally developed instrumentation used in each competition.

A variety of products are being developed and disseminated by a majority of projects. Brochures describing project activities and journal articles reporting project findings were cited most frequently as products. Training manuals and project developed instruments are being developed by approximately one-half of the current projects. Figure 6 indicates the percentage of projects in individual competitions developing specific products.

Finally, project objectives also varied across projects, however, the objectives could be categorized into nine major areas: assessment/referral, placement/followup, education/training, counseling, program development, dissemination/replication/continuation, agency coordination, manpower training, and research. Ninety-three percent (93%) of the current projects reported on objectives. Figure 7 identifies the percentage of current projects practicing specific objectives in each of the above areas. Of those projects reporting on objectives, the majority (at least 70%), are specifically involved in student assessment, development and implementation of a service delivery model, development and dissemination of products, dissemination of information through conferences, presentations, and articles, conducting conferences, workshops, and inservices, for purposes of manpower training, and specific training of professionals and paraprofessionals.

The growth of services in secondary transition for youth with handicaps has been remarkable over the past four years. The Compendium of Project Profiles 1988, upon which this review is based, provides a comprehensive, detailed account of the activities cooperating agencies and organizations, project products and availability, the number and profiles of project participants, direct services, related service components, project evaluation plans, and instrumentation. As new editions are published each year by the Transition Institute, the Compendium will provide a valuable record of the early years of transition in the United States.

Part One

Preliminary Findings (Year 3)

1. Social Ecology of the Workplace

Janis Chadsey-Rusch

There are several reasons why it is desirable to study the types of social behaviors that exist in employment settings. First, when employers are surveyed, they frequently mention social behaviors as being important on the job (Rusch, Schutz, & Agran, 1982; Salzberg, Agran, & Lignugaris/Kraft, 1985). Second, the results from recent research suggests that individuals with handicaps have lost their jobs because they lack appropriate social behaviors (Brickley, Browning, & Campbell, 1982; Brickey, Campbell, & Browning, 1985; Greenspan & Shoultz, 1981; Hanley-Maxwell, Rusch, Chadsey-Rusch, & Renzaglia, 1986. Finally, the acquisition and maintenance of appropriate social behaviors may help to facilitate friendships and social support networks on the job (Chadsey-Rusch, 1988; House, 1981; Pogrebin, 1987).

When youth with handicaps make the transition from school to work, few are employed competitively full time (e.g., Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuschi, & Fanning, 1985; Wehman, Kregel, & Seyfarth, 1985). One possible way to enhance the employment of these students and to ensure that once they are employed they stay employed is to make certain that youth exhibit appropriate work-related social behaviors when they leave high school.

This past year a study was undertaken to investigate the social behaviors exhibited by youth with mild and severe handicaps. In particular, the purposes of this study were: (a) to provide an assessment of the types and frequencies of social behaviors being used by secondary-aged youth with mild and severe handicaps, (b) to compare the patterns of these interactions to the social interactions exhibited by nonhandicapped workers (Chadsey-Rusch & Gonzalez, in press), and (c) to identify possible social skill areas that might need remediation before youth leave high school.

Comparison Sample

Eight nonhandicapped workers constituted the comparison sample; their interaction patterns have been described in previous research (Chadsey-Rusch & Gonzalez, in press; Chadsey-Rusch, Gonzalez, & Tines, 1987). Essentially, the nonhandicapped subjects worked at the same time and performed a similar job as a group of handicapped workers. During arrival at work, lunch/break, and two work periods, narrative recording procedures were used to describe social interaction patterns. All subjects were observed five times during each condition (e.g., arrival) across seven competitive employment sites (six of which were food service and one was light industrial), for a total of 5.5 hours.

The same observation and recording procedures used for the comparison sample were also used to observe the sample of students with mild retardation; that is, all subjects were observed by trained observers via the use of narrative recording procedures. However, none of the students could be observed during any work periods because none was involved in work experience programs or vocational placements in the community. Consequently, the students were observed during arrival at school, lunch, and during an instructional time with their teacher. All teacher observations were conducted in segregated classrooms with special education teachers; however, four of the students were also enrolled in classes with nonhandicapped peers.

After the observations were completed, they were dictated, typed, and assigned a social interaction code. Additional information collected included teacher ratings of social behaviors and a Social Network Questionnaire.

Comparisons between the nonhandicapped workers and students with mild handicaps were analyzed descriptively along four dimensions: task vs. non-task interactions, directions of interactions, purpose of interactions, and purpose by condition.

Results and Discussion from Direct Observations

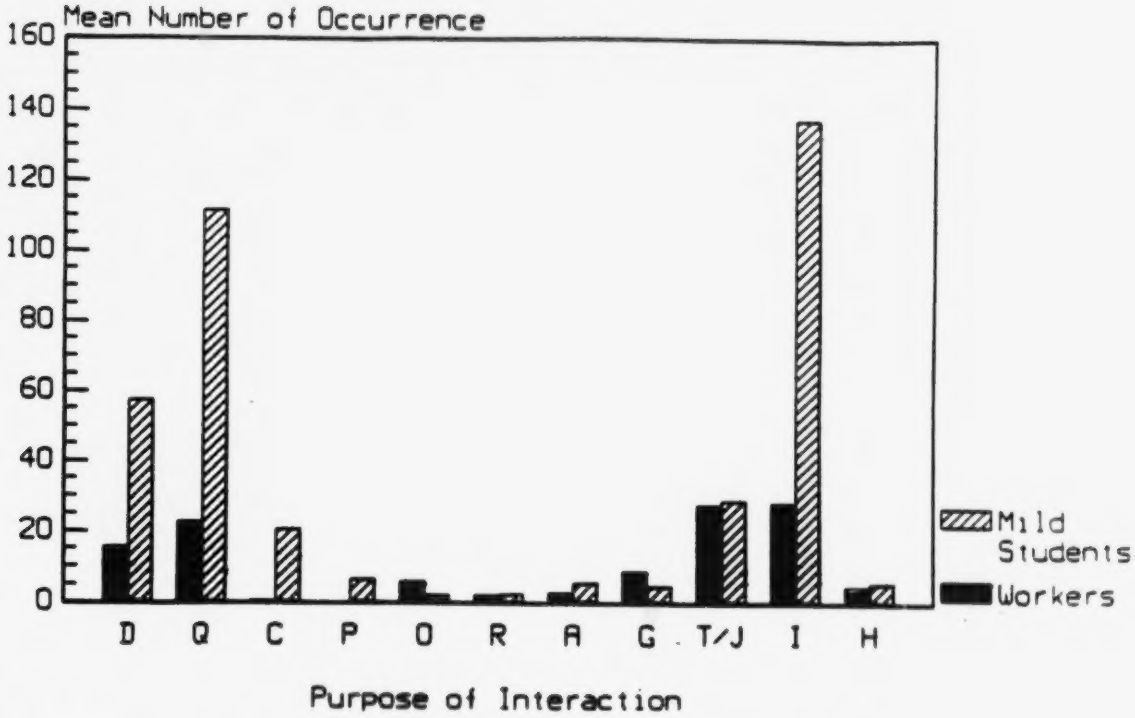
While in school, the sample of students with mild handicaps resembled nonhandicapped workers along the dimension of task vs. non-task interactions. That is, workers were involved primarily in task-related interactions during their work periods and were involved in non-task-related interactions during break/lunch and when they arrived to work. The student sample also was involved in more social non-task-related interactions during lunch; their task-related interactions occurred during their interactions with their teachers and when they arrived at school.

Workers interacted very little with their supervisors, and when they did, the majority of their interactions were task related. The students, however, were involved in more interactions with their teachers than with their peers, and these interactions were nearly all task-related (94%). Students initiated only 4% of the interactions with their teachers. In interactions with peers, students initiated fewer interactions with nonhandicapped peers (38%) than with handicapped peers and received fewer initiations from their nonhandicapped peers (30%) than from handicapped peers.

Overall, students were involved in more interactions where the purpose was to direct, question, criticize, praise, and inform than were workers on the job. This is not surprising because these would likely be the type of interactions that one might assume would be used by teachers in the classroom. It is important to note, however, that workers on the job were rarely observed to be criticized or praised (Chadsey-Rusch & Gonzales, in press). As students make the transition from school to work, they will need to be able to work without this type of overt feedback.

Another interesting finding was that few students were involved in teasing and joking interactions. In the workplace, 22% of all the worker's interactions involved teasing and joking. In school, students teased and joked only 8% of the time. Because many of the observations were conducted in the classroom, it is possible that this context constrained the frequency of teasing and joking interactions; however, students teased and joked a smaller percentage of the time during lunch than did the nonhandicapped workers. Because teasing and joking interactions seem to occur frequently in the workplace, this may constitute a social skill area that needs intervention.

Overall, there did not seem to be remarkable differences between the students with mild handicaps and the nonhandicapped workers along the social skill dimensions analyzed thus far in the present study (Figure 1). In fact, the social skills of the students we observed seemed to be quite appropriate for the context of high school. An important implication of this study, however, would be to see how or if the behavior of these students changed once they entered the workplace. Because the social context of work is different from that of school, it is difficult to make comparisons between the two and to predict whether or not students will also utilize effective social skills once they get jobs. Unfortunately, none of these high school students was involved in any type of community work experiences. It would seem to be critical to make certain that all mildly



D - Directions
Q - Questions
C - Criticism
P - Praise
O - Offers assistance
R - Requests assistance
A - Amenities
G - Greets
T/J - Teasing/Joking
I - Information
A - Attention

Figure 1. Purpose of Interactions: Mean number of occurrence by group for students with mild handicaps.

handicapped students are involved in some type of direct work experience in the community before they leave high school. Certainly, the best place to determine whether youth of transition age have appropriate work-related social behaviors is to assess them when they are on the job.

Another important consideration was the number of interactions that occurred between students with and without handicaps. Students with handicaps were involved in more interactions with handicapped peers (65%) than with nonhandicapped peers (35%). When students with mild handicaps get jobs, it is likely that they will work with nonhandicapped persons; consequently, interactions between nonhandicapped and handicapped students should be encouraged.

Results and Discussion from Additional Measures

In addition to observing students directly, teachers were also asked to fill out the "Social Competence Rating Scale," which contains items that correspond to the social interaction code used to analyze the direct observations. Teachers were asked to fill out this information on students because direct observations can only sample a portion of the social behaviors likely to be exhibited.

Two certified special education teachers were asked to fill out the rating scales because they each had about equal contact with the students participating in the research. Interestingly, there appear to be differences between the two teachers and their ratings for the students. Using a nomination criterion of 4 as a cut-off point, the male teacher (who also provided instruction in math, science, history, and health) found students to have deficient social skill ratings in 10 areas: using social amenities with peers, asking peers a question when one doesn't understand something, complimenting teachers and peers, helping teachers and peers without being asked, asking peers for assistance, telling jokes or funny stories to teachers and peers, responding appropriately to criticism from peers, discussing a variety of topics with teachers, accepting physical contact from others, and making small talk with teachers and peers. The female teacher (who taught social relations, reading, and English) identified five areas of concern: complimenting peers, helping peers without being asked, telling jokes or funny stories to peers and teachers, responding appropriately to criticism from peers, and handling unfriendly joking or kidding from others.

That there were differences between the ratings of the two teachers is not surprising because a rating scale is only an evaluative summary that is open to error and bias. In addition, social skills vary depending upon context and the characteristics of the people in the context (McFall, 1982). However, several summary statements can be made. First, both teachers indicated that this sample of students experienced more social difficulties with their peers than with the teachers. Second, the areas that were identified as being problematic by both teachers were: complimenting peers, helping peers without being asked, telling jokes and funny stories to teachers and peers, and responding appropriately to criticism from peers.

There is somewhat of a correspondence between the direct observations and the ratings by the teachers. For example, upon direct observation there was little evidence of joking and teasing. In addition, across all subjects and conditions there were only three instances of students being involved in praising one another, and only five instances of students offering to help one another.

Interestingly, there were 75 instances of criticism involving students and their peers across all conditions. For example, in one instance a student was reading out loud and several peers corrected the student's mispronunciations. In another example, one of the participant's handicapped peers told her she looked like a turtle walking around while she was carrying a plant. When the teacher entered the classroom, the participant immediately told the teacher that the peer had pulled the leaves off the stem of the plant. In another example, the participant in the study told a peer, "I wish you would shut-up, you are acting so immature." And a peer told the participant, "You got mossy teeth." Which, when told, the participant responded, "I brush them everyday."

In the comparison sample, there were also very few instances of compliments or praise, but co-workers were more likely to offer to help or assist other co-workers. In addition, there were few instances of criticism observed toward one another. Clearly, students cannot take this type of social behavior into work settings. Again, the question remains whether these students will change their social behavior once they enter the work setting.

After all direct observations were completed, eight of the nine students were individually asked questions contained on the Social Network Questionnaire. (The ninth participant never came back to school.) The majority of the students (6) believed that what they were learning about in school would help them get a job, and seven of the eight students were able to identify the type of job they wanted when they got out of high school. The jobs mentioned by the students included: beautician, secretary or nurse, work with animals, ride race horses, computers (after community college), communications (after working in a nursing home and going to community college), and welding. Only half of the students had ever held a job before (except that all of the females had babysat before), and only two students had taken any courses that directly related to the jobs in which they were interested. It must also be remembered that none of the students was participating in any community work experience program. When the students were asked about how they felt abut leaving high school for work, four of them said they didn't know, the other four individuals said, "o.k.," "be a challenge," "not ready," and "will get paid."

In terms of friendships, only two students said that they had a lot of friends. However, four of the students (who did not have a lot of friends) said that they did not want more friends. Their reasons for this statement were: "too many friends are hard to keep up with," "too many friends will stab you in the back," and "they will get you in trouble." After school, most of the students "hung out" with friends from their neighborhoods, and frequently these individuals were drop-outs from high school (none of whom had jobs) or girls that had gotten pregnant while in high school. All of the students felt that they had someone in whom they could confide if they were having problems; friends were frequently mentioned in this category.

Overall Summary

Upon direct observation it was found that students with mild handicaps were involved in types of interactions similar to those that they are likely to encounter in the workplace; however, most of these interactions occurred with greater frequency in the school setting. Generally, the types of interactions in which the students were involved were appropriate for the context of high school. The big question remains about whether students with mild handicaps can adapt their social skills to work settings. For example, can they work with fewer instances of praise, questions, and directions about tasks. Because none of the students was involved in any community work experience programs, it was not possible to see if these students had this adaptability and flexibility.

There were other differences in the purposes of interactions between the comparison sample and students with mild handicaps. The students engaged in more instances of criticism with their peers, rarely offered to assist their peers, and were involved in fewer teasing and joking interactions. In work settings, the comparison sample was involved in very few instances of criticism, but were involved in more instances of helping other co-workers and teasing and joking with their co-workers. Again, it may be that when students make the transition to work environments, they may learn to adapt to the social environment of the work setting. However, if students are critical of their co-workers (and cannot accept criticism appropriately) and rarely offer to assist their co-workers, they may experience difficulties.

Half of the students wished that they had more friends. Frequently, co-workers can become friends and it is likely that most co-workers will be nonhandicapped. Upon direct observation, it was found that the students with mild handicaps interacted more with their handicapped peers than with nonhandicapped peers. Certainly, interactions with nonhandicapped peers should be encouraged because nonhandicapped individuals will likely be co-workers to the students and possibly could become their friends.

Sample of Students with Severe Handicaps

Ten students with severe handicaps and an average age of 18 years were observed in the present study. Only two IQ scores (M = 23) were reported for the sample; three of the students were classified as severely mentally retarded and seven were classified as severely and profoundly mentally retarded. Six of the students were ambulatory; five of the students were involved in verbal communication programs and five were involved in augmentative communication programs.

The same observation procedures used for the comparison sample were also used to observe the students with severe handicaps. Unlike the mild sample, all of the students with severe handicaps (except for one) were also observed during community-based vocational training experiences. The jobs the students performed consisted of cleaning cable boxes, preparing and filling liquid soap dispensers at a chemical janitorial supply company, stamping envelopes at a nonprofit business, and watering plants at a library. All of the students attended a segregated class at an integrated junior high school.

Comparisons between the nonhandicapped workers and the students with severe handicaps were analyzed descriptively along the same four dimensions used to look at the data from the students with mild handicaps: (a) task vs. non-task interactions, (b) directions of interactions, (c) purpose of interactions, and (d) purpose of condition.

Results and Discussion from Direct Observations

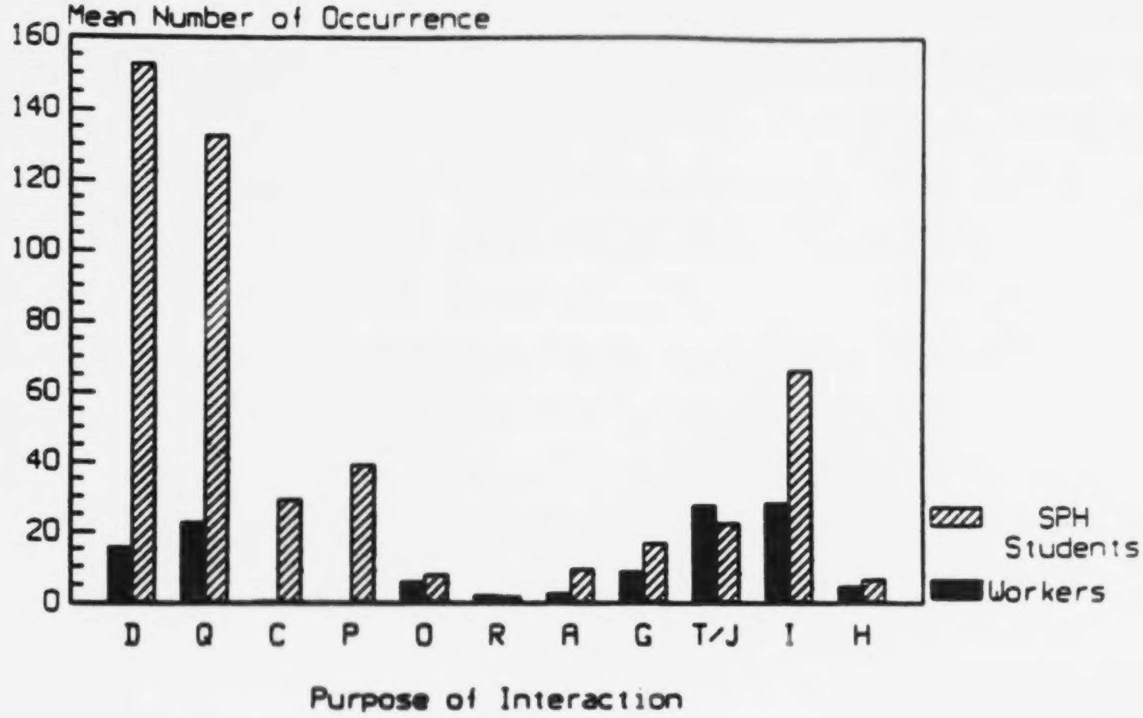
Although workers were involved in slightly more task-related interactions than nontask-related interactions (51%), students with severe handicaps were involved in many more task-related interactions than nontask-related interactions (82%). In addition, these task-related interactions dominated all four observation conditions (i.e., arrival, vocational, teacher, and lunch) for the students with severe handicaps, whereas most task-related interactions for workers occurred primarily during their work periods.

On the job, workers interacted more with their co-workers (79%) than with their supervisors. However, the students with severe handicaps were only involved in interactions with their peers (both handicapped and nonhandicapped) 1% of the time, and 69% of these interactions were task related. Overall, 95% of the interactions were teacher initiated to students.

Because of the amount of instruction that takes place in school, the students were involved in many more interactions than workers on the job. Similar to the mild sample of students, the students with severe handicaps were involved in more interactions where the purpose was to direct, question, criticize, praise, and provide information (Figure 2). Although this pattern of interactions occurred throughout all four conditions, two conditions are of particular importance because of their implications for transition: vocational training and lunch.

During vocational training, the students received many directions, information, questions, and praise from teachers that were primarily task related, which implies that the students were not very independent on the job. If students are to learn to perform job tasks as independently as possible, teachers will have to reduce the amount of instruction and feedback that is given to students--particularly when the students are close to graduation age. Well-trained students who can perform job tasks without a lot of direct instruction are more likely to be able to make a smoother transition from school to work.

Interestingly, even during lunch, students were primarily involved in interactions where the purpose was to question, direct, or provide information. Again, these interactions were mostly task related. Because workers on the job are likely to engage in a variety of nontask-related



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T/J - Teasing/Joking

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A - Attention

Figure 2. Purpose of Interactions: Mean number of occurrence by group for students with severe handicaps.

interactions (particularly during break, lunch, and arrival), it may be important to teach more of these types of interactions to students who have severe handicaps. Although nontask-related interactions may not be crucial for job acquisition and maintenance, they certainly are important for establishing social support and friends on the job. Thus, in order to facilitate the transition from school to work for students with severe handicaps, teachers may want to decrease their social interactions that are task related and increase those that are nontask related.

Results and Discussion from Additional Measures

Two certified special education teachers who team-taught together in the same room rated each student on the "Social Competence Rating Scale." The majority of the students were rated by both teachers as having difficulties on most of the social skill items. However, both teachers agreed that at least half of the students (N=5) often or always responded appropriately to interactions, greetings, questions, and physical contact from teachers. One of the teachers indicated that she believed that at least half of the students also often or always responded appropriately to interactions, greetings, questions, and directions from peers.

Because of the student's limited cognitive abilities, the parents (and two guardians) responded to the questions on the Social Network Questionnaire; nine of the ten parents responded. Nearly half of the sample (4) indicated that they believed that what their children were learning in school would prepare them for work. All but two individuals stated that they wanted their son or daughter to work in an integrated setting, and three parents mentioned jobs that they hoped their son or daughter would have when they graduated: working at a cable TV company, doing something clerical, and working in the computer industry. Five of the nine parents/guardians indicated that they were anxious and unsure of what was going to happen to their children once they graduated from high school.

In terms of friendship patterns, seven of the nine parents/guardians indicated that their children did not have a lot of friends, and all but one individual stated that they wished their son or daughter had more friends.

Overall Summary

In order for the students with severe handicaps to make a smooth transition from school to work, they will need to work within the supported employment model. The students in this sample were still receiving so many task-related directions and questions from their teachers that it was clear that they were not independent. However, as these students approach graduation, emphasis should be placed on fading these types of interactions so that the students can function as independently as possible in work settings.

Although task-related interactions should be decreased, nontask interactions should be increased, particularly with nonhandicapped peers at school and in work settings. Across the entire sample of students, only 1% of all interactions were with peers. The majority of parents/guardians indicated that they wished that their son/daughter had more friends. In order for friendships to develop, there needs to be opportunities for interactions to occur. The data from this sample of students suggest that few interactions of this type are occurring and schools will need to take more of an active role in promoting these types of interactions. Because friends can frequently be established in work settings, and most co-workers will be nonhandicapped, interactions between handicapped and nonhandicapped persons need to be facilitated.

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2. Co-worker Mediated Intervention Strategies

(Co-worker Involvement)

Frank R. Rusch

Over the past few years, we have witnessed a growing trend to support workers with severe disabilities after employment (Rusch & Mithaug, 1980; Wehman, 1981). This support includes several dimensions: (a) community-referenced assessment and job placement (Menchetti, Rusch, & Owens, 1983; Pancsofar, 1986), (b) community-referenced instruction and job site advocacy (Stainback, Stainback, Nietupski, & Hamre-Nietupski, 1986), and (c) instructional training and evaluation after actual employment (Rusch, 1986; Rusch, Chadsey-Rusch, & Lagomarcino, 1986). Supported employment focuses upon persons who will require intensive, ongoing support to earn wages when they are employed in regular work sites alongside persons without disabilities (P.L. 98-527; P.L. 99-506).

Although several researchers have described the supervision that is likely to occur after a person is placed on the job, the specific types of supervision currently in practice are relatively unknown. Specifically, the roles of co-workers and work supervisors have received little attention. The purpose of the Co-worker Mediated Research Program is to investigate these roles with respect to enhancing long-term employment of persons with severe disabilities. The program is based upon research that assumes that greater co-worker and work supervisor involvement enhances the target employee's work performance.

Recent research has begun to identify the types and degree of supervision that are provided by co-workers (Lagomarcino & Rusch, in press; Rusch & Minch, in press; Shafer, 1986; White, 1986). Co-workers are defined as employees who meet one or more of the following criteria: (a) work in the proximity of the target employee (within 600 sq. ft.), (b) perform the same or similar duties as the target employee, or (c) have breaks or eat meals in the same area as the target employee.

Rusch and Minch (in press) listed validating instructional strategies, collecting subjective evaluations, implementing training procedures, collecting social comparison information, and maintaining behavior in the context of actual employment as co-worker roles reported by a handful of applied researchers who have enlisted the involvement of co-workers. Table 1 lists nine studies that reported involving co-workers in the five different roles. Studies were included in this review if they reported data collected on the job after the target worker was employed. Employment was defined as placement in integrated work settings where the target employee was paid. Studies that reported upon methods used in sheltered employment, pre-vocational, and educational environments were not included. A brief description of each of the studies follows.

Validating instructional strategies. When potential instructional strategies were used to change target behavior, co-workers typically were consulted to determine if these strategies were acceptable. Schutz, Rusch, and Lamson (1979) used an employer-validated procedure to reduce aggressive behavior of three food service employees with moderate mental retardation. Employers suggested that if similar aggression was displayed by co-workers who were not handicapped, the consequence of such aggression would be a warning and a one-day suspension. Consequently, when Schutz et al. (1979) applied warnings and suspensions, all three employees discontinued their aggression. In this study, using employer-validated techniques such as those found in the natural work setting not only met with employer approval but also was highly effective.

Table 1

Studies Reporting Co-worker Involvement after Competitive Employment.

Study	Validating Instructional Strategies	Collecting Subjective Evaluations	Implementing Training Procedures	Collecting Social Comparison Information	Maintaining Behavior
Schutz, Rusch, & Lamson (1979)	X				
Schutz, Jostes, Rusch, & Lamson (1980)		X			
Crouch, Rusch, & Karlan (1984)		X	X	X	
White & Rusch (1983)		X			
Rusch & Menchetti	X	X	X		
Rusch, Weithers, Menchetti, & Schutz (1980)		X	X	X	X
Rusch, Morgan Martin, Riva, & Agran (1985)				X	X
Kochany, Simpson Hill, & Wehman (1981)			X		X
Stanford & Wehman (1982)			X		X

Collecting subjective evaluations. Subjective evaluation is a method used to evaluate socialization, interpersonal, and work-performance skills through judgments made by significant others (e.g., co-workers) in order to determine if the changes resulting from training are perceived as important (White, 1986). Often, subjective evaluation is accomplished by asking how well the target employee is performing, teaching the target employee to perform, and then asking again whether the target employee is performing as expected.

Schutz, Jostes, Rusch, and Lamson (1980) utilized subjective evaluation to judge the quality of the sweeping and mopping performances of two food service employees with moderate mental retardation. Co-workers and supervisors were asked whether they would "accept this as a swept (mopped) floor" (p. 308) after completion of the task by the employee. Results indicated that when the job coach accepted the floor as clean, so did the co-workers and supervisors.

Crouch, Rusch, and Karlan (1984) used supervisor judgments to evaluate the effects of verbal-nonverbal correspondence training on task duration of three employees with moderate mental retardation. The correspondence training procedure suggests that employees should be reinforced for saying what they are going to do and then doing what it is they said they were going to do (cf. Karlan & Rusch, 1982). Ten days after the initiation of correspondence training and once at the end of the study, supervisors were asked if the target employees' duration of task performance was a problem. On both occasions, all three supervisors stated that task duration and starting times were no longer a problem. Interestingly, although the target employees' supervisor stated that speed was not a problem, one employee failed to perform at the same or equivalent criterion set by his co-workers on all but one occasion preceding the first evaluation.

White and Rusch (1983) reported a study in which employers, supervisors, and co-workers rated 22 behaviors of employees with mental retardation. The target employees also self-rated their work performance. White and Rusch sought to determine if these four groups rated work performance differentially. Interestingly, all four groups appeared to use different criteria, with employers rating overall performance the lowest, followed by supervisors. The target employees rated their own performance the highest. This study is important because it suggests that job coaches should expect different ratings from co-workers.

Implementing training procedure. Training has been reported often as a critical element in the retention of individuals with handicaps (cf. Wehman, Renzaglia, & Bates, 1985). When providing on-the-job instruction, Shafer (1986) suggested that job coaches involve co-workers in one of several roles, including training and observing roles. Rusch and Menchetti (1981) increased the compliant work behavior of a food service employee with moderate mental retardation using a co-worker-delivered consequence. Although the job coach provided preinstruction about the expected behavior and consequences in a practice-plus-warnings phase, the co-workers actually sent the employee home when he did not comply with their requests. A multiple baseline across supervisors, kitchen laborers, and cooks was used to demonstrate that after being sent home once during a practice-plus-warning condition, the employee complied on all subsequent occasions with supervisors, kitchen laborers, and cooks, even though the intervention was never applied by cooks.

Collecting social comparison information. Rusch, Chadsey-Rusch, White, and Gifford (1985) define social comparison as the examination of a target individual's behavior before and after instruction with similar behavior of nonhandicapped peers. They posit that the range of acceptable behavior demonstrated by valued peers provides a standard against which the behavior of the target individuals may be judged. Rusch, Weithers, Menchetti, and Schutz (1980) compared the topics repeated by an employee with moderate mental retardation with topics repeated by his co-workers performing similar responsibilities. During baseline, the target employee repeated topics about five times as often as his co-workers. After implementation of a job coach-plus-co-worker feedback intervention directed toward topics repeated, the employee reduced his repetitions to levels approximating those of his co-workers.

In a similar study, Rusch, Morgan, Martin, Riva, and Agran (1985) utilized social comparison to evaluate the effects of a self-instructional package on the time that two employees with mild and moderate mental retardation spent working. In this study, the two target employees' performance was compared to that of two co-workers performing the same tasks. The job coach taught the target employees to use a self-instructional sequence in which each employee asked a self-directed question, answered the question, verbally guided her performance of the task, and self-reinforced. During baseline, the percentage of time spent working was below the standard set by the co-worker comparisons on almost all occasions for both employees. After self-instructional training, both employees increased their time spent working to levels equal to or above their co-workers' range of performance.

Maintaining behavior. Kockany, Simpson, Hill, and Wehman (1982) trained co-workers to maintain the acceptable behavior of a food service employee with moderate mental retardation. Acceptable behavior was defined as complying with requests made by the supervisor, refraining from physically violent behavior, and paying attention to co-workers. A changing-criterion design in which the employee was praised by the job coach for maintaining longer periods of acceptable behavior was implemented along with efforts to withdraw the job coach from the employment site systematically. When the job coach was present at the work site for 90 minutes per day, the supervisor assumed responsibility for verbally reinforcing the employee. Results demonstrated that even after the job coach's time on site was reduced to a 20-minute period every other day, the target employee continued to maintain high levels of acceptable behavior under the supervisor reinforcement.

Stanford and Wehman (1982) taught co-workers to respond to social interactions initiated by two employees with severe mental retardation. The employees worked in a nursing home as dishwashers. Initially, a job coach prompted target employees to interact with co-workers, after which the job coaches prompted the co-workers to respond to target employees' interactions. Following intervention, both target employees and co-workers interacted at rates that were higher than before intervention was introduced.

Additional co-worker roles have been identified by examining data collected from actual supported employment projects. One such project is the Illinois Supported Employment Program (ISEP), which provides technical assistance to approximately 30 state-funded supported employment programs. ISEP evaluates model program development and analyzes costs associated with supported employment (Trach, Rusch, & DeStefano, 1987). An important aspect of model program development is assessing the degree to which these model programs actually implement the characteristics of supported employment that have been associated with important outcomes, such as average hours worked per month, hourly wage, and employment benefits.

ISEP also examines individual worker characteristics such as IQ scores, vocational training history, and residential living arrangements. Additionally, ISEP measures the amount of support provided monthly to target employees in terms of vocational skills training, assessment, and case management services. One component of target employee support that is evaluated monthly is co-worker involvement. Based on monthly data collected from each of supported employment programs served by ISEP, six co-worker roles have been identified as currently in practice in supported employment. These roles include training, associating, befriending, advocating, data collecting, and evaluating.

In order to identify further co-worker support currently being provided to target employees, Rusch, Minch, and Hughes (1988) conducted personal interviews with 10 job site supervisors of businesses in the Champaign-Urbana, Illinois area that employed individuals with severe disabilities. Employment sites represented four occupational areas: food service, light industrial, janitorial/maintenance, and warehouse. One purpose of this investigation was to determine the existence of specific co-worker functions in these job sites. The results displayed in Table 2 indicate that 90% of the work supervisors reported that when co-workers act as supervisors, they both evaluate target employee performance and provide information about specific jobs. Furthermore, 90% of the supervisors reported that co-workers provide training to new target employees, while six of the 10 supervisors reported that co-workers interact socially with target employees while on the job.

A second purpose of the Rusch, Minch, and Hughes (1988) study was to identify the support provided by job site supervisors to target employees after job placement. Job site supervisors typically have hiring and

Table 2

Percentage of Employers Identifying the Acceptability in their Job Sites of the Following Co-worker Functions.

Function	Percent
Serves as normative reference - co-worker's performance is observed to develop standard for acceptability	90
Evaluates employee performance when serving in position of immediate supervisor	90
Serves as advocate by:	
1. providing more information about specific job when serving in position of immediate supervisor	90
2. participating in IWRP meeting	60
3. serving as substitute on job for employee	10
Interacts socially with employee while on job	60
Training employee - pairing co-worker with new employee to:	90
1. demonstrate job task	50
2. answer questions	40
3. provide information	30
4. show new employee around	20
Maintains work behaviors by:	
1. Switching job tasks with employee to enhance performance	40
2. providing peer pressure	20

supervisory responsibilities that are critical to the long-term employment of target employees. However, no research has been reported that investigates the role of job site supervisors in the supported employment process. Specifically, the roles that work supervisors play in the hiring and supervision of employees with severe disabilities in terms of job placement (e.g., willingness to allow employment training specialists to provide training), job-site training (e.g., how they have modified the job to enhance employee performance and how they train their own employees), ongoing assessment (e.g., how they evaluate their employees, how often they evaluate, and how they provide feedback), and follow-up supervision (e.g., what measures they take to ensure that employees maintain performance standards) need clarification.

The results of the study indicated that job site supervisors were directly involved in providing support in all aspects of the supported employment process, including job placement, job site training, ongoing assessment, and follow-up supervision. Specific activities included hiring the employee, modifying the job, providing direct training, assisting co-workers in providing employee support, evaluating the employee, and providing incentives to maintain employee work performance. Additionally, all supervisors indicated that they would welcome assistance from an employment training specialist in order to provide additional support to target employees.

The results of this investigation support and extend a growing literature that has focused upon the role of co-workers on the job, particularly in relation to the supported employment model. Rusch and Minch (in press) and Shafer (1986) have reported co-worker roles similar to those reported in this investigation. Training and evaluating the target employee appear to be supervisor-related, as well as co-worker-related functions. Fifty percent of the supervisors interviewed in this investigation reported providing up to two hours direct training to new employees, and 90% indicated that they would allow co-workers to assist in training. Similarly, 90% of the supervisors conducted some form of formal written evaluation.

There is no published research on the role of job site supervisors in the supported employment process, despite an extensive literature demonstrating the effectiveness of supported employment (Lagomarcino, 1986; Rusch, 1986; Rusch et al., 1986; Rusch & Mithaug, 1980; Shafer, 1987). Prior research has suggested that co-workers who have job responsibilities similar to those of target employees are the primary supporters (cf. Shafer, 1987). This investigation found that supervisors would allow their job descriptions to be re-evaluated and possibly redesigned. They also indicated that they would allow tasks to be changed, accessibility to be improved, and pictures to be used to guide and direct target employee performance.

Several areas of future research are suggested by the results of this investigation. Although the support role of co-workers who share similar work responsibilities has been suggested as a major factor in the long-term employment of target employees, it may well be that supervisors also contribute significantly to job retention. Future research clearly is needed to separate the involvement of supervisors and co-workers. Additionally, research that identifies supervisor involvement as a function of job type may be warranted. In this investigation, there are several differences between the responses of food service and light industrial supervisors. For example, food service supervisors indicated that they would consider some direct involvement in meetings that focused upon planning the type of support to be provided to target employees, whereas light industrial supervisors were undecided about or not willing to participate in individualized rehabilitation planning.

In summary, although only ten supervisors were interviewed in this investigation, the results of these interviews provide strong evidence of supervisor involvement in the long-term employment of employees with handicaps. This investigation suggests that job site supervisors are actively involved in training and evaluating target employees and that they would welcome professional consultation from employment training specialists.

Finally, a study was undertaken during Year 3, which sought to extend the findings of Rusch and Minch (1988) by describing co-worker involvement reported by model supported employment projects in Illinois. Specifically, this study sought to describe the number of target employees who were involved with their co-workers and the type of co-worker involvement being reported. Additionally, this study reports the percentage of co-worker involvement in relation to AAMD Classification and placement approach (i.e., individual versus group placement).

The sample for this study included all individuals served by 31 agencies implementing supported employment projects throughout the State of Illinois. These agencies (n=31) were funded by various federal and state agencies including the Illinois Department of Rehabilitation Services, the Illinois Department of Mental Health and Developmental Disabilities, and the Governor's Planning Council on Developmental Disabilities to implement supported employment programs. In addition, each agency receives technical assistance and evaluation services by the Illinois Supported Employment Project (ISEP) based at the University of Illinois.

Each agency submits monthly reports on each supported employment consumer to ISEP staff. These reports provide data on numerous employment outcome factors including type and level of co-worker involvement. The only criterion for including individuals in this sample was that they be enrolled in a supported employment project meeting federal criteria for supported employment (Federal Register, August 14, 1987) at any time during the months from July 1987 through December 1987.

The research questions addressed by this study involved the effects that specific classification of disability, time, and type of placement may have had on the type and level of co-worker involvement. Also of interest was the relationship between different types of co-worker involvement and the frequency of occurrence and nonoccurrence of co-worker involvement. During the period under study each agency implementing a supported employment project checked whether or not individuals benefitted from six types of co-worker involvement including training, association, befriending, advocating, data collection, and evaluation. Table 3 lists the definitions that agencies used to determine whether each type of co-worker involvement had occurred for each consumer.

The dependent variable under analysis during this study involved the occurrence and nonoccurrence of each type of co-worker involvement. Independent variables included type of co-worker involvement, time, classification of disability, gender, and type of placement. Time involved a determination of whether the number of individuals benefitting and not benefitting from each type of co-worker involvement changed over the six-month period under study. Type of placement involved three levels, individual, enclave, and mobile crew placements. Classification of disability involved seven levels including six levels of mental retardation

Table 3 *Definitions Used by Adult Service Agencies*.

Training -	Co-workers support target employee(s) by providing on-the-job training.
Associating -	Co-workers associate with target employee(s) by either conversing with them during breaks or eating lunch with them.
Befriending -	Co-workers interact socially with target employee(s) outside of the work place.
Advocating -	Co-workers advocate for target employee(s) by supporting and protecting the target employee's rights.
Data collecting-	Co-workers collect data by observing and recording a range of social and work behaviors, including production rate and social behavior.
Evaluating -	Co-workers evaluate the target employee's performance by providing written or verbal feedback.

(i.e., borderline, mild, moderate, severe, profound) based on the American Association on Mental Retardation's classification (Grossman, 1983) and the seventh level involving a determination of chronic mental illness.

Table 4 indicates the exact number of individuals with handicaps per month for whom co-worker involvement was reported to have occurred (i.e., yes) and not occurred (i.e., no). July was the only month in which there was a significant departure from the trend indicated for the remaining months, primarily because July was the first month when agencies were requested to report co-worker involvement. As Table 4 indicates, agencies submitted co-worker involvement data on only 20 persons. Therefore, the data for the month of July were not included in any further analyses, and the remaining tables represent data for August 1987 through December 1987. A repeated measures analysis was conducted to assess whether the number of

Table 4. Number of Persons with Handicaps per Month for Whom Co-worker Involvement Did/Did Not Occur (1987)

Type of Co-worker Involvement	Occurrence of Co-worker Involvement	July (n=20)	August (n=286)	September (n=331)	October (n=319)	November (n=282)	December (n=326)
Training	no	11	139	158	149	139	150
	yes	9	146	173	170	143	176
Association	no	1	64	56	84	60	69
	yes	19	221	275	235	222	257
Befriending	no	18	227	244	245	222	246
	yes	2	58	87	74	60	80
Advocating	no	19	187	207	201	172	209
	yes	1	98	124	118	110	117
Data Collection	no	20	234	283	261	227	267
	yes	0	51	48	58	55	59
Evaluation	no	1	117	141	121	101	105
	yes	19	168	190	198	181	221

Analysis of Variance Table

Source	df	Chi-Square	P
Intercept	4	1.32	NS
Occurrence/Nonoccurrence	8	102.29	.00001
Type of Co-worker Involvement	20	4.27	NS
Interaction	40	22.82	NS

individuals for whom co-worker involvement had and had not occurred had significantly changed from August 1987 through December 1987. Results indicated no significant effects for any factors except for the factor involving occurrence and nonoccurrence of co-worker involvement (X =102.29, df=8, p .0001). Table 4 indicates a very homogeneous grouping for all categories of co-worker involvement and for the occurrence and nonoccurrence of co-worker involvement. Likewise very little change is indicated from month to month. However, there is a very large difference indicated between the number of individuals who experienced and did not experience co-worker involvement. In short, for the first few months (i.e., August 1987 through December 1987) during which the interaction between individuals with handicaps and their nonhandicapped co-workers was monitored, it appeared that there was no change in the amount of co-worker involvement over time and more individuals tended not to have experienced co-worker involvement in the areas of befriending, advocating, and data collection while experiencing some co-worker involvement in the areas of training, associating, and evaluation. By far, the most extensive co-worker involvement occurred in the area of associating.

The second test conducted was a standard weighted-least-squares test of homogeneity to identify which types of co-worker involvement tended to significantly differ with respect to occurrence and nonoccurrence of involvement. Table 5 indicates the mean number of persons with handicaps for the five month period, August through December 1987, for whom co-worker involvement was reported and the results of a standard Pearson and Likelihood Ration Chi-Square analysis for a two-factor contingency table. Results indicate a high significant difference exists between the mean number of individuals for whom co-worker involvement had occurred and for whom

Table 5. Mean number of Persons with Handicaps During the Period August 1987 through December 1987 for whom Co-worker Involvement Did/Did not Occur

Type of Co-worker Involvement	Occurrence of Co-worker Involvement	
	yes	no
Training	147	161.6
Association	66.6	242
Befriending	236.8	71.8
Advocating	195.2	113.4
Data Collection	254.4	54.2
Evaluation	117	191.6

Results from two-factor chi-square analysis.

Statistic	df	value	p
Pearson Chi-Square	5	343.56	0.000
Likelihood Ration Chi-Square	5	362.75	1.000

co-worker involvement had not occurred which simply corroborates the results from the repeated measures analysis. However, of interest were the contributions by the individual cell chi-squares to the total chi-square. The result indicated that except for training, all factors' contribution to the total chi-square exceeded the critical value of 3.84 (alpha=.05, df=1). A one-way chi-square post-hoc test also indicated highly significant differences (df=5, X =154.7, p .001) among the different categories of co-worker involvement when controlling for the occurrence and nonoccurrence of co-worker involvement. It appears that there is a high degree of variation among the different categories of involvement in addition to the significant difference with respect to occurrence and nonoccurrence. In short, there has been a greater probability of co-worker involvement in the areas of associating and evaluation than in any other category.

Analyses were also conducted to identify the effects of classification of disability and type of placement, respectively, on both category of co-worker involvement and the occurrence of involvement. Tables 6 and 7 indicate the mean number of individuals for the five month period by classification of disability and type of placement, respectively, for whom co-worker involvement had and had not occurred for each type of involvement. Below the frequency tables are the results of the weighted-least-squares analysis of variance. As is indicated there were highly significant effects due to classification of disability and type of placement. A post-hoc test was conducted to test for differences among classification of disability with respect to occurrence and nonoccurrence collapsing across categories of involvement to determine which classifications of disability demonstrated the most significant differences between occurrence and nonoccurrence of co-worker involvement. Results clearly indicated a highly significant difference among classifications of disability (df=5, X =33.86, p .0001) A review of individual cell chi-squares indicated that categories of borderline and severe mental retardation had the most significant differences in the number of individuals who had and had not benefitted from co-worker involvement. In short, it is clear that individuals with borderline mental retardation had experienced a higher incidence of involvement with nonhandicapped co-workers than individuals with more severe handicaps.

The results from the analysis of co-worker involvement with respect to type of placement was conducted in exactly the same fashion as the analysis of co-worker involvement with respect to classification of disability. Results from this analysis as indicated in Table 6 clearly indicate a significant difference due to the type of involvement and type of placement. Again, of primary interest is the degree of homogeneity among different types of placement. Again, a two-factor test of homogeneity was conducted to identify across types of co-worker involvement (df=2, X =18.70, p .0001), although individual cell chi-squares indicated this was primarily due to individuals in mobile crew placements. There was a significantly higher proportion (71%) of individuals in mobile crew placements who had not benefitted from co-worker involvement than in any other type of placement.

Table 6. Mean Number of Persons with Handicaps by Classification of Disability for whom Co-worker Involvement Did/Did Not Occur.

Type of Co-worker Involvement	Occurrence of Co-worker Involvement	Borderline (n=37)	Mild (n=99)	Moderate (n=60)	Severe (n=18)	Profound (n=32)	Mentally Ill (n=6)
Training	no	18	49	23	12	16	3
	yes	19	50	37	6	16	3
Association	no	5	23	11	3	7	2
	yes	32	76	49	15	25	3
Befriending	no	26	82	43	17	23	4
	yes	11	17	17	1	9	1
Advocating	no	20	62	35	16	23	4
	yes	17	37	25	2	9	1
Data Collection	no	6	83	51	17	25	4
	yes	31	16	9	1	7	1
Evaluation	no	12	8	18	40	11	3
	yes	20	10	42	59	26	3

Analysis of Variance Table

Source	df	Chi-Square	P
Intercept	1	1062.70	.0001
Occurrence/Nonoccurrence	5	142.13	.0001
Type of Co-worker Involvement	5	48.18	.0001
Interaction	25	82.17	.0001

Table 7. Mean Number of Persons with Handicaps by Type of Placement for whom co-worker Involvement Did/Did Not Occur

Type of Co-worker Involvement	Occurrence of Co-worker Involvement	Individual (n=63)	Type of Placement Enclave (n=145)	Mobile Crew (n=29)
Training	no	29	69	17
	yes	37	76	12
Association	no	12	25	13
	yes	53	120	16
Befriending	no	47	115	27
	yes	19	30	2
Advocating	no	44	84	27
	yes	22	61	2
Data Collection	no	55	125	26
	yes	11	20	3
Evaluation	no	27	50	14
	yes	39	95	15

Analysis of Variance Table

Source	df	Chi-Square	P
Intercept	1	1947.88	.0001
Occurrence/Nonoccurrence	5	271.81	.0001
Type of Co-worker Involvement	5	48.18	.0001
Interaction	25	17.29	.068

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3. Employer Perceptions of Hiring Individuals with Disabilities

Adelle Renzaglia

Within the past 10 years, the focus of vocational training and placement efforts for persons with handicaps has shifted away from employment in segregated sheltered settings (e.g., work activity centers) toward employment in less restrictive environments within community businesses and industries. A variety of work options (i.e., competitive and supported employment) have been described that offer a continuum of employment alternatives to maximize the participation of persons with disabilities in appropriate paid work opportunities (Kiernan & Stark, 1986; Rusch, 1986). In addition to developing a range of employment alternatives, special educators, vocational educators, and rehabilitation personnel have attempted to identify relevant variables and implementation procedures that facilitate job success and the integration of individuals with handicaps into the work force. Conducting employer interviews, job inventories, and on-the-job training represent a sample of recommended strategies that can contribute to a positive employment experience for an individual who is disabled as well as for an employer (Rusch & Mithaug, 1980; Wehman, 1981). The attitude of prospective employers toward those persons who exhibit some type of disability represents yet another variable that is less visible but has been documented to affect the employment of and success on the job for individuals with handicaps (Barton, Coladarci, & Carlson, 1954; Olshansky, 1961; Wolfe, 1961).

Since these early investigations concerning employer attitudes, the body of literature related to this topic has increased. Current research efforts have not only assessed attitudes but have investigated relationships between employer attitudes toward employees with disabilities and a variety of other factors. Researchers have explored differences in attitudes with respect to (a) business-related variables such as the size and type of business (Bolanovich & Rasmussen, 1968; Fuqua, Rathburn, & Gade, 1984; Gade & Toutges, 1983; Grace, 1970; Hartlage, 1966, 1974; Phelps, 1974; Stewart, 1977; Williams, 1972); (b) employer attributes such as age, sex, level of education, or previous experience with employees with handicaps (Bolanovich & Rasmussen, 1968; Cohen, 1963; Florian, 1978; Fuqua et al., 1984; Gade & Toutges, 1983; Hartlage, 1966, 1974; Phelps, 1974; Pumpian, 1982); and (c) employee disability types (Fuqua et al., 1984; Galbreath & Feinberg, 1973; Hartlage, 1971; Hartlage, Roland, & Taraba, 1971; Mithaug, 1979; Thomas & Thomas, 1985; Williams, 1972). In addition to the assessment of attitudes, potential problems and concerns associated with employers' perceptions of hiring an individual who is handicapped have been identified (Bolanovich & Rasmussen, 1968; Fuqua et al., 1984; Grace, 1970; Gade & Toutges, 1983; Hartlage et al., 1971; Mithaug, 1979; Smith, 1981; Thomas & Thomas, 1985).

Effects of Business- and Employer-Related Variables on Attitudes

The most frequently explored business variables with respect to their impact on attitudes of employers have been the size (i.e., the number of employees) and the type of the business (e.g., manufacturing, hotel, hospital). A majority of the studies have concluded that the larger the business, the more positive the attitudes of the employer (Hartlage, 1966, 1974; Phelps, 1965). Specifically, Gade & Toutges (1983) reported that when businesses had more than 50 employees, concern about disability was minimal. Similarly, Phelps (1974) indicates that attitudes were more favorable among businesses with 50 or more employees and less favorable among businesses with fewer than nine employees. Grace (1970) found that the number of employees with physical disabilities increased with the size of the business, and those with more than 1,500 workers employed persons with the most severe impairments. A few studies (Bolanovich & Rasmussen, 1968; Williams, 1972; Wolfe, 1961) found no significant differences between employer attitudes or hiring practices and business size. However, the numbers of employees at businesses in two of the samples (Bolanovich & Rasmussen, 1968; Williams, 1972) were greater than 45 and 100, which fell within the range defined as "large" in other studies (Grace, 1970; Phelps, 1974).

A variety of conclusions have been drawn from the investigation of relationship between business type and employer attitudes. In general, manufacturing firms were more receptive to employing applicants with disabilities than were service and sales-oriented businesses (Hartlage, 1966, 1974). Yet among small firms, employment opportunities were better among nonmanufacturers (Grace, 1970). Studies that analyzed data from specific business types reported that employers at hospitals and motels exhibit more favorable attitudes toward workers with handicaps (Phelps, 1974). Clerical, food service, custodial, gas station, and upholstery job types are reported as viable training areas (Stewart, 1977), but the findings of Phelps (1974) and Stewart (1977) conflict directly with those provided by Hartlage (1966, 1974). Bolanovich and Rasmussen (1968) found no significant differences in employer attitudes among different business types.

Other factors that were explored as business-related variables include the number of currently hired employees who were disabled and the location of the business in a metropolitan or rural community. In the few studies that addressed these factors, no significant differences were identified with respect to either variable (Bolanovich & Rasmussen, 1968; Fuqua et al., 1984).

Few studies have investigated the relationship between employer characteristics and attitudes. Research results indicate no significant differences in attitude as a result of the sex or age of the employer (Fuqua et al., 1984; Gade & Toutges, 1983). Findings related to the level of education attained by the employer are scarce and contradictory. Cohen (1963) reports that the more education employers have had, the less favorable their attitude. Yet Phelps (1974) indicates that more education results in more positive attitudes. Finally, Hartlage (1974) found no significant differences in the relationship between education and receptivity toward persons with disabilities.

An assessment of an employer's previous experience with employees who are disabled demonstrated positive receptivity after previous experience (Florian, 1978; Pumpian, 1982), an increase in positive attitudes with an increase in positive experiences (Bolanovich & Rasmussen, 1968), and no relationship between previous contact and attitudes (Cohen, 1963). Hartlage (1971) found that employers of unknown receptivity were actually more positive toward individuals with specific disabilities than those employers who had exhibited previous receptivity to persons with different handicapping conditions.

One additional variable or characteristic of employers that was investigated by Phelps (1974) was the length of time the employer had spent on the job. The results indicated that the longer employers had been in the same job, the less favorable were their attitudes toward persons with disabilities.

Studies of the relationship between various business and employer factors and attitudes or receptivity toward hiring individuals with handicaps, report a variety of contradictory results. A closer look at the studies shows that the type of disability considered or evaluated varies from study to study, and one could speculate that the variability among the results is due in part to the range of specific disabilities rather than to general employer attitudes toward persons with any handicapping condition. However, because of individual differences and considerations that surround different types of disability, a separate evaluation of each type of disability may be more informative.

Effect of the Type of Disability on Attitudes

Several studies have explored the relationship between specific and individual disability types and employer attitudes or receptivity. Williams (1972) found that employers differentiated the rank of their preferences of handicapping conditions according to the types of jobs. Other studies reported employer preferences for amputees over persons who are labeled mentally retarded or emotionally disturbed (Hartlage et al., 1971), individuals who are paraplegic over persons with epilepsy or multiple sclerosis (Thomas & Thomas, 1985), and persons with mental retardation over persons with epilepsy (Hartlage, 1971). Other employers who have been surveyed appear to be more hesitant in hiring applicants who are blind or mentally retarded than in hiring individuals who have epilepsy (Fuqua et al., 1984). Additionally, more positive attitudes have been found toward disabilities that are considered least ambiguous (e.g., deafness) than toward disabilities that are perceived to be most ambiguous, such as mental illness (Galbreath & Feinberg, 1973). In summary, there is no obviously conclusive trend concerning the receptivity toward any one type of handicapping condition. Possible explanations for a diversity of conclusions related to attitudes toward specific disability types could be related to other variables (e.g., knowledge, previous experience) not simultaneously investigated. However, the current results certainly indicate that vocational and placement personnel should not be discouraged, but should anticipate potential concerns of employers.

Problems and Considerations Cited by Employers

Researchers have also surveyed employers to document their perceptions of specific problems or concerns that may exist with respect to hiring individuals with handicaps. Employer concerns can be categorized into areas that reflect requisite skills and behaviors and those that relate to management and productivity. Cleanliness, social behavior, appearance, and competence are features that have been cited as important by some employers (Mithaug, 1979; Smith, 1981; Thomas & Thomas, 1985). Other issues that employers indicate as primary hiring considerations include productivity, accident rates, workmen's compensation, absenteeism, and supervision (Bolanovich & Rasmussen, 1968; Fuqua et al., 1984; Hartlage et al., 1971; Mithaug, 1979). Only Grace (1970) evaluated some of these concerns in relation to previous experience, finding that employers with experience indicated financial concerns (e.g., workmen's compensation) as a major limitation, and inexperienced employers cited concerns with co-worker social compatibility.

Methods

The methods most frequently used to assess employer attitudes and the relationships between other variables and attitudes has been the administration of written surveys or questionnaires. The literature reviewed in most instances describes the surveys and the procedures employed to collect the data, but there are few explanations of how the instruments were developed. Citations of the use of questionnaires validated by experts or piloted before extensive investigation are seemingly few in number (Cohen, 1963; Florian, 1978; Hartlage, 1974; Pumpian, 1982). In some studies, the experimenters relied upon instruments developed before their specific investigations or adapted earlier instruments in order to meet their needs (Fuqua et al., 1984; Hartlage et al., 1971; Phelps, 1974).

Efforts to place persons with multiple or severe mental and physical disabilities have been encouraged and increasingly emphasized with a broader range of employment alternatives presently being developed. What is needed is an appropriate and comprehensive assessment approach that enhances understanding in order to facilitate employment, to develop more appropriate training and placement strategies, and to identify variables that may be targeted for change in order to increase employer acceptance of individuals with all types of handicapping conditions with respect to the more recently developed work options. No previously used instrument has evaluated a combination of employer and business variables and levels of employer tolerance related to more recent work alternatives and employment considerations.

The purposes of research efforts during Year 3 were to design an instrument that (a) measured the level of tolerance or acceptance of employers toward diverse employment alternatives and adaptations; (b) includes additional business and employer variables that may correlate with levels of employer tolerance; and (c) offers a valid and reliable method of assessment. The following section describes the procedures conducted to draft and pilot an instrument to assess employer tolerance and the methods used to evaluate its validity and reliability.

Methods

Instrument Construction[a]

The Business/Employer Assessment Instrument (BEAI) was constructed with information obtained from initial employer interviews, previous research efforts described in the literature, and feedback provided by a panel of nominated experts from special education and rehabilitation. All three sources contributed to the development and design of the final instrument before any actual pilot use or data analysis.

Employer interviews. Vocational training and placement specialists from six vocational agencies in Illinois provided the names of nine employers who were then contacted for interviews. Three employers who hire individuals in each of three job areas (janitorial, food service, and manufacturing) participated in the interviews and responded to a series of eight questions about employment practices, hiring policies, and specific concerns of employing persons with disabilities. Each interview was tape recorded, with permission from the employer, and later transcribed in order to document responses accurately. The information obtained from the interviews was summarized informally to document employment trends and to validate individual hiring practices in order to facilitate the composition of questions for the first draft of the assessment instrument.

Feedback from experts. Ten individuals who have contributed to refereed publications within the past year (e.g., *JASH*, *ETMR*, *Journal of Rehabilitation*) concerning various aspects of the employment of individuals with handicaps were asked to nominate at least 12 professionals whom they felt could offer expertise, insight, and feedback regarding the construction and content of the Business/Employer Assessment Instrument. A panel of experts was selected from the nominations that were submitted by including those individuals who were nominated by more than one member of the selection group. Nine nominees were contacted by letter to inform them of the role and level of involvement that was being requested before they were sent a draft of the instrument for comment. After the first draft of the Business/Employer Assessment Instrument was completed, each member of the panel of experts was sent a copy of the instrument and a Feedback Questionnaire that requested responses to specific questions in order to provide constructive feedback on the items and variables being considered for assessment and the instrument format and design.

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[a] Instrument available upon request.

A second group of 10 professionals in the field of special education were given the directions and questionnaire items for Part II with instructions to categorize each item according to one of the topic areas that was provided. The purpose of the participation of these professionals was to assess the reliability of the intended content of the items in Part II of the BEAI.

Pilot of the Instrument

Upon receiving comments and suggestions from the panel of experts about the initial draft of the Business/Employer Assessment Instrument, revisions were made and a final draft of the instrument was prepared for piloting.

Subjects. A master list was made of businesses in the Champaign-Urbana area that were documented to employ persons in janitorial, food service, or manufacturing positions. Letters explaining the project and indicating the need for employer participation in the piloting of the instrument were sent to every business on the master list while final revisions of the BEAI were being completed. Approximately 10-14 days after the letters were mailed, the businesses on the master list were contacted by telephone to confirm the list of 45 employers (15 each from janitorial, food service, and manufacturing businesses) who were willing to participate in the pilot.

Administration. Surveys were mailed with an introductory letter that specified a three-week turnaround, a feedback form, and a self-addressed, stamped envelope to each of the 45 employers who volunteered to participate as subjects. Two weeks after the initial mailing date, all employers who had not yet returned completed surveys were telephoned. A letter to thank each employer for his or her assistance with the project was sent as a survey was received. One week after the due date, follow-up telephone calls were placed to employers who had not responded, and two weeks later a second telephone call was made to employers whose completed questionnaires remained outstanding. One month after the original due date, any employer who still had not responded was sent a second survey packet with a letter requesting their assistance within 14 days.

Results

Content and Format of the Instrument

The revised draft of the BEAI was distributed to 45 employers as a pilot. Data analysis procedures (frequency and correlation analyses along with the computation of the Cronbach's Alpha reliability index for all scale scores) were conducted on each of the four parts of the survey (see Appendix A for a copy of the survey used in the pilot). Part I requested demographic information about the business that employed the respondent (e.g., size of business) and the employer or respondent of the questionnaire (e.g., age, sex, education level). Responses were recorded for the survey items by respondents selecting the correct or appropriate choice from a prepared list of possible responses. Some questions requested specific information while others merely requested the respondent to indicate the degree of satisfaction with previous experiences concerning employees with disabilities and job trainers.

Knowledge proficiency was measured in Part II of the survey instrument using a five-point rating scale (1=Not at all to 5=Great extent) to identify the degree or level of knowledge a respondent had with respect to each of 12 content areas. Five levels of knowledge proficiency ranging from general content knowledge to the ability to provide expert advice were included for self-report by respondents. These five levels of knowledge included:

1. Converse about content in general
2. Give specific information about content
3. Apply content to employment issues
4. Apply knowledge to practical problems
5. Give expert advice

On each content area and with each level of knowledge the respondent indicated his or her level of knowledge by circling the numeral of the rating scale that best represented his or her self-evaluation report. Total scores for every individual content area were calculated by summing the numerical rating scale responses provided by all respondents.

Part III of the BEAI provides a 4-point Likert Scale (1=Strongly Disagree to 4=Strongly Agree) for responses to 28 statements about issues related to the employment of persons with disabilities. Separate responses were obtained on each item for the respondents' degree of agreement as it applied to individuals with moderate/severe mental retardation, physical handicaps, and multiple handicaps. The items to which responses were given represented statements from the following categories: ability and competence (e.g., With proper training a person with disabilities could successfully perform the tasks required by the job.), financial costs (e.g., Employment of persons with disabilities would increase business costs or expenses), benefits (e.g., Employees with disabilities are more responsible than other employees.), co-worker interaction (e.g., Persons with disabilities would not be able to socialize appropriately with co-workers.), and philosophical perspective (e.g., It is best for persons with disabilities to work in places where other persons with disabilities work.).

Part IV of the BEAI assessed the attitude of respondents toward accepting or accommodating employees with disabilities. Sixteen attitude items were presented as statements of behavioral intent, and responses were indicated using a 5-point Likert Scale (1=Not at all likely to 5=Quite likely). Respondents were requested to evaluate each statement and to individualize their responses with respect to consideration of persons with moderate/severe mental retardation, physical handicaps, and multiple handicaps.

Data Analysis

Completed surveys were returned by 28 (62%) of the employers. Scale totals were calculated for responses in Part II, Knowledge Proficiency; Part III, Perceptions of persons with moderate/severe mental retardation (MR), physical handicaps (PH), and multiple handicaps (MH); and Part IV, Attitudes toward persons with moderate/severe mental retardation, physical handicaps, and multiple handicaps. The scale total for Knowledge Proficiency was created by summing the individual scores for each content area. The Perception scale totals were calculated by adding the numerical responses from all the items within each disability group. Scale totals for each disability type in Attitude were obtained by summing the numerical responses of each item.

Item-total scale correlations were calculated to identify specific scale items that should be eliminated from the instrument before any further administration of the BEAI. A correlation coefficient of less than .3 for an item on two or more of the scales (i.e., Perceptions MR, PH, MH and Attitudes MR, PH, MH) was utilized as the criterion to eliminate that item from the scale. Based upon the criteria, item 24 was dropped from Part III, and item 10 was taken out of Part IV.

Correlations computed among Knowledge Proficiency scores for each content area were positive and ranged from .07 to .90 with a median of .59. No items were eliminated from this section of the survey.

Cronbach's Alpha reliability index and corrected item-total correlations were calculated to identify additional items that should be withdrawn from Part II, III, and IV scales. For any item that exhibited a corrected item-total correlation below .3 on two more scales, the item was eliminated. Items 21, 22, and 23 in Part III (Perceptions) were identified as those items to be withdrawn before further administrations of the instrument. Table 1 provides the results of the Cronbach's Alpha reliability index after all unnecessary items were removed from the scale. Cronbach's Alpha as a measure of reliability for each scale were above .7 and ranged from .89 to .95. The median corrected item-total correlations ranged from .48 to .66.

Pearson Product-Moment correlation coefficients were computed among Knowledge Proficiency, Perception, and Attitude Scales (Table 2). The correlations among the Perception scales ranged from .68 to .92 with a median .70. The correlations among Attitude measures ranged from .84 to .89

Table 1

Reliability Measures for Perception and Attitude Scales*

Scale	Number of Items	Cronbach's Alpha	Median Corrected Item-Total Correlation
I. Perception scale for			
mentally retarded (MR)	24	.90	.57
physically handicapped (PH)	24	.95	.66
multiply handicapped (MH)	24	.89	.48
II. Attitude scale for			
mentally retarded (MR)	15	.92	.66
physically handicapped (PH)	15	.90	.57
multiply handicapped (MH)	15	.93	.64

*Note: Items that are included in each of the derived scales have corrected item-total correlations of .3 or greater on two or more of the scales.

Table 2

Means, Standard Deviations, and Correlation Matrix of Perception, Attitude, and Knowledge Proficiency Scales

Scale	Mean	Standard Deviation	Perception			Attitude			Knowledge Proficiency
			MR	PH	MH	MR	PH	MH	
I. Perception Scale									
Mentally Retarded (MR)	64.6	13.3	1.0						
Physically Handicapped (PH)	69.5	17.9	.68	1.0					
Multiply Handicapped (MH)	61.3	17.4	.70	.92	1.0				
II. Attitude Scale									
Mentally Retarded (MR)	49.4	15.0	.52	.48	.66	1.0			
Physically Handicapped (PH)	53.0	13.1	.63	.69	.71	.84	1.0		
Multiply Handicapped (MH)	49.7	13.2	.61	.46	.58	.89	.85	1.0	
III. Knowledge Proficiency Scale	108.2	47.7	-.01	-.05	.05	.28	.33	.29	1.0

with a median of .85. The relationship among perception and attitude measures ranged from .46 to .71 with a median of .61. The relationship among perception and knowledge proficiency ranged from -.01 to .05 with a median of -.05 and the relationship among attitude and knowledge proficiency ranged from .28 and .33 with a median of .29.

Discussion

Summary of Results

The results of the data analysis procedures indicate that the reliability of the BEAI in a revised format will be at an acceptable level and that the individual scales (Knowledge Proficiency, Perceptions, Attitude) are indeed measuring unique and not overlapping aspects of employer acceptance of employees with disabilities. Cronbach's Alpha levels of .89 to .95 were obtained after eliminating items 21, 22, 23, and 24 from the Perception Scale (Part III) and item 10 from the Attitude Scale (Part IV). Measures of reliability (as indexed by Cronbach's Alpha) indicate that a high likelihood exists for reliability across the responses of participants and among the items on each scale.

The correlation coefficients within each scale are greater than the coefficients across the scales, which supports the intention to measure three separate facets of employer acceptance, knowledge, perceptions, and behavioral intent or attitude toward the employment of persons with disabilities. However, the analysis of the relationship between the Perception and Attitude Scales depicted some interesting results. The greatest degree of correlation across these two scales were not found consistently among similar disability types. In fact, the Perception scale for persons with physical handicaps was the only one in which the correlation was greatest between scales and within groups (.69) than across groups (PH/MR - .48, PH/MH - .46). Other coefficients indicate a greater relationship among Perceptions of MR and Attitudes of PH (.63) and Perceptions of MH and Attitudes of PH (.71), and in both Perceptions of MR and MH scales the lowest correlation was found within each disability type (MR/MR - .52, MH/MH - .58). These differences may be due in part to the small sample size used in the study.

Respondent Feedback

In order to pilot the BEAI, respondents were requested (in addition to completing the questionnaire) to provide feedback concerning the clarity of instructions and examples, the comprehension of the items, and the amount of time it took to respond to the entire instrument. Participants generally agreed that the language used across items was easy to understand and that the directions and examples provided were clear and useful for the completion of each part of the survey. Respondents reported that the entire BEAI took from 20 to 35 minutes to complete, which indicates that the task was not overly demanding with the typical responsibilities performed by the respondents on the job.

Implications of Further Assessment

In its revised format the BEAI provides a method for assessing the level of acceptance of an employer toward employees with disabilities. The design of the instrument allows for responses to be obtained with respect to any disability group or job type, provided that an adequate definition of the type of disability exists and the type of job or position within a business is specified.

The organization of the content separates the concept of employer acceptance or attitude into three separate factors: knowledge, perceptions, and behavioral intent. The separation of these factors permits an analysis of responses to be conducted in order to examine more clearly what information an employer feels he or she may already have and what action may be taken regarding employment of an individual with handicaps. Responses from the BEAI may also indicate the misinformation that may exist in the minds of employers and the potential need for and benefit from further education or inservice in order to provide a more accurate perspective of persons with disabilities and their role and ability as a member of the work force.

A large scale investigation using the BEAI is needed to assess employer acceptance of employees with disabilities. Research questions related to the use of the survey include:

1. Are there specific employer or business characteristics that significantly affect the attitude of an employer toward hiring an individual with disabilities?

2. Are the levels of knowledge proficiency, perceptions, and/or attitude significantly different across the types of jobs frequently considered for employment of persons with disabilities?

3. Does the level of knowledge proficiency or perceptions significantly affect the attitude of employers toward persons with disabilities?

The results of such a research initiative could contribute to the field of special education and vocational rehabilitation in numerous ways. Job specialists who are responsible for developing employment opportunities may be able to use the information to assist with selecting appropriate placements based upon business and/or employer characteristics. The effects of education and inservice conducted within individual businesses or professional organizations may be able to be measured more accurately with the utilization of the BEAI before and after the program of implementation. Initial community assessments may include the distribution of the BEAI to identify and target employment or disability issues or areas from which further information may be beneficial to local community employers.

However, without empirical evidence that can respond to the above questions, only hypothetical assumptions can be suggested. The current emphasis upon appropriate vocational training and placement for individuals with disabilities places the responsibility of facilitating successful employment options upon many professionals. The suggested questions are probably not unique to any of these professionals, and the answers could only assist them with their effectiveness on the job.

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4. Federal Policy Affecting Transition: A Value-Critical Analysis

Lizanne Destefano

According to the OSERS model, transition is an intermediary phase in the school-to-work continuum, a phase that necessarily involves the services provided by a variety of agencies, including special education, vocational rehabilitation, vocational education, labor, and social security, among others. For the vast majority of students with handicaps a successful transition to competitive employment and independent living is mediated by the adult service delivery system. Thus, because of the nature of transition, federal policies that govern special education and the disability system will exert a profound influence on interventions designed to facilitate transition.

We have identified eight policy units that affect transition, including special education, vocational rehabilitation, vocational education, Social Security, labor, civil rights, tax revisions, and budget reconciliation (Table 1). Considering the large scope of the policy system that comprises these eight units, the focus of our policy research project was confined to what we believed was the core of the system affecting transition. This core consisted of special education and vocational rehabilitation. Although the other units have a profound influence on the success of the transition initiative, special education and vocational rehabilitation are the primary service agencies responsible for preparing individuals with handicaps for employment and independent living.

Table 1: FEDERAL ELEMENTS AFFECTING TRANSITION

Budget Reconciliation	Rehabilitation	Civil Rights	Vocational Education	Special Education	Social Security	Labor	Tax Reform
Cobra (PL 99-272) (PL 98-270) (PL 97-35)	Rehab. Act Amendments of 1986 (PL 99-506) Rehab. Act of 1973 (PL 93-112)	Sections 503 & 504. Rehab. Act of 1973 (PL 93-112) DD Assistance and Bill of Rights Act Amendments of 1986 (PL 98-527)	Carl D. Perkins Vocational Education Act Amendments of 1986 (PL 99-159)	EHA (PL 99-457) EHA (PL 98-199) EAHCA (PL 94-142)	SSI Improvements Act of 1986 (PL 99-643) (Work Incentives Provisions)	Fair Labor Standards Act Amendments of 1986 (PL 99-486) Job Training Partnership Act Amendments of 1986 (PL 99-496)	Tax Reform Act of 1986 (PL 99-514) (Targeted Job Tax Credit & Barrier removal tax credit)

Purpose

The purpose of the policy research program was twofold:

1. to provide a deeper understanding of the two federal units, special education and vocational rehabilitation, that have the greatest impact on the transition initiative;
2. to analyze the implications for transition of the interaction of these two units.

Research Questions

The following research questions were posed in order to fulfill these purposes.

1. What are the forces that shape the two policy units?
2. Is the transition initiative consistent with these forces?
3. Is the interaction between special education and vocational rehabilitation coherent? If not,
4. What are the implications for transition?

Methods

Two methods were used in order to answer the research questions: a value-critical approach to policy analysis and a review of legislative history. These methods are discussed below.

A Value-Critical Approach to Policy Analysis

In essence, a value-critical approach to policy analysis is devoted to the critical assessment of the values that underlie and guide public policy (Rein, 1976). In general, policy analysis can be thought of as a method of generating policy alternatives for selection by public officials. The purpose of policy analysis is the production of arguments that provide sound reasons for the adoption of particular policies. Being arguments, they are composed of premises from which conclusions are derived. The soundness of a policy argument is contingent upon the validity of both its empirical and normative premises (Paris & Reynolds, 1983). Empirical premises are primarily concerned with how effective a policy alternative is in meeting its goals. However, in a democracy, public policy is seldom selected solely on the basis of effectiveness (i.e., empirical premises). Rather political values enter the equation (normative premises), profoundly affecting policy selection.

Historically, three basic values have shaped the nature and selection of social policy in the United States: equality, efficiency, and liberty (Rein, 1976; Guthrie, 1980). For example, the pursuit of liberty has given rise to a number of pieces of legislation devoted to the protection of civil rights. The pursuit of efficiency has given rise to a number of pieces of legislation designed to increase employment among welfare recipients. The pursuit of equality has given rise to a number of pieces of legislation devoted to increasing equal opportunity.

From the perspective of the value-critical approach, policies are interdependent systems composed of three dimensions: (a) abstract values, (b) operating principles that give these values form in specific programs and administrative arrangements, and (c) the outcomes of these programs (Rein, 1976). For example, the special education policy system looks like this:

Values-----------------Operating Principles----------------Outcomes
equality------------due process, mainstreaming-------high % of students
with handicaps
served.

From this perspective, public policy is value driven. The abstract values that are adhered to determine what policy is enacted and eventually what outcomes are achieved.

The value-critical approach to policy analysis not only identifies the value dimension of public policy but subjects it to critical examination. It asks: Is the pursuit of a given value justifiable given the human demands of the situation?

In this paper we are concerned with two values that have shaped special education and vocational rehabilitation policy: equality and efficiency. Equality as a political value is closely associated with the notion of "rights," both moral and legal. A right is an entitlement that confers authority to demand certain social goods, those goods being morally self-evident in relation to the dignity of human life (McCloskey, 1984). Basic, self-evident rights include the right to life, respect for one's moral autonomy, and the right to self-development and thus to education. Such moral rights become legal entitlements when the value of equality is pursued in public policy. The value of equality is the moral position that the basic rights of all persons should be respected. When this value is realized in the public domain, basic moral rights are guaranteed by law; that is, they become legal entitlements.

The value of efficiency, on the other hand, is based upon the notion of "utility." Efficiency is generally defined in terms of the ratio between costs and benefits. That which produces the most benefit for the least cost is efficient. A policy system driven by the value of efficiency will seek to maximize aggregate utility or benefits. Such a system is not concerned with guaranteeing individual rights; its concern is with producing the maximum benefit for the society as a whole, regardless of how the benefits are distributed.

Legislative History

Current policy is usually an incremental adjustment to previously formulated policy (Braddock, 1987; Lindblom, 1959). Because of resource constraints and the nature of democratic politics (i.e., the give and take between various interests), comprehensive planning is not practiced in government. Rather, modest alterations are made to the status quo which are designed to ameliorate rather than eradicate problems. This incremental policy process is summarized succinctly by Braddock (1987):

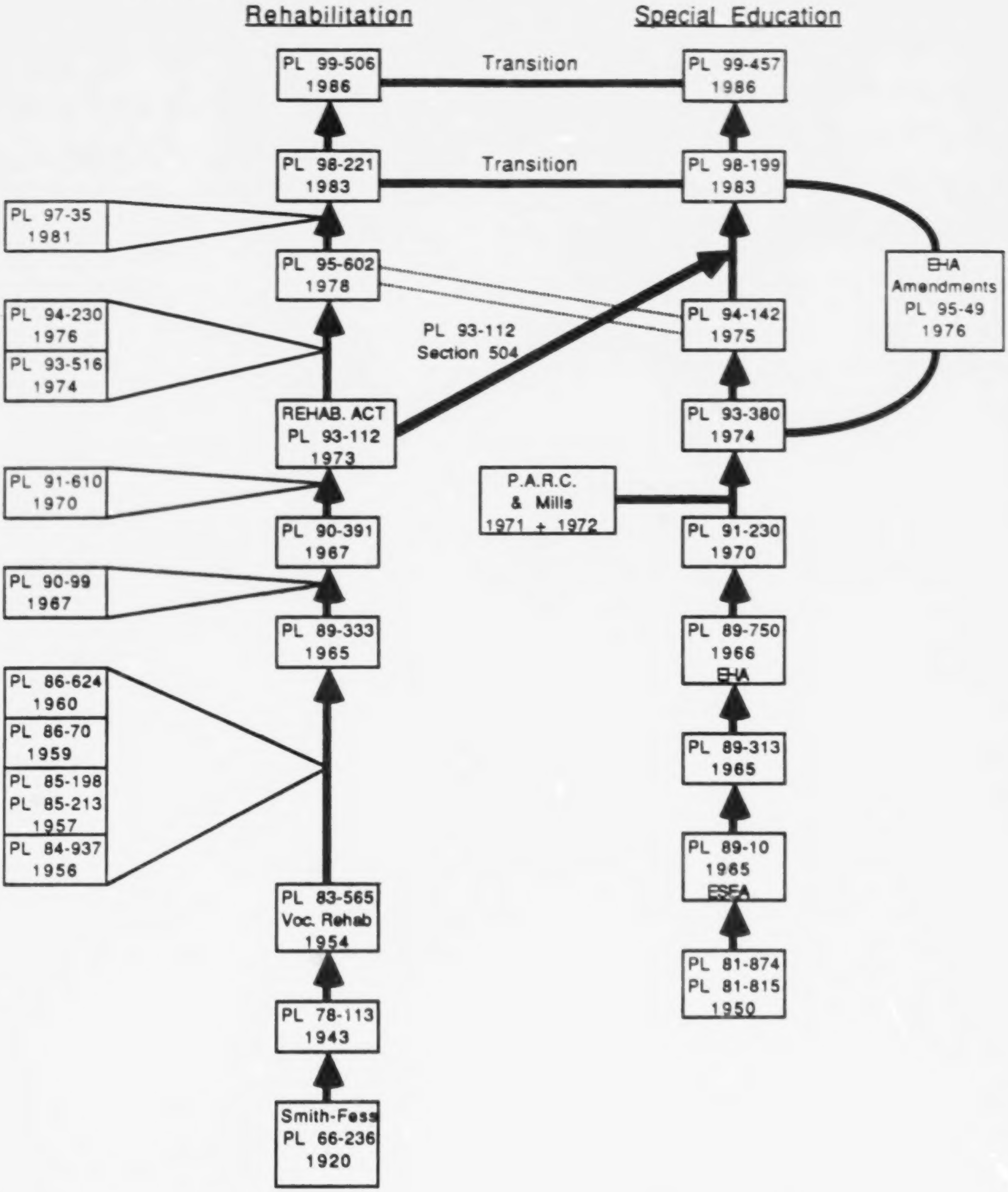
> Government programs are rooted in the past. Federal programs are rarely created totally anew, but rather are usually grafted to existing statutory and administrative structures. To understand current federal policy...one must be familiar with the historical record of myriad individual federal...program elements, and one must also appreciate each individual element's relation to its programmatic environment, its fiscal context, and its legislative history. (p. 1)

As this quotation implies, an understanding of a particular policy system is contingent upon an understanding of its legislative history. The legislative history of a policy system reveals particular trends or patterns which are indicative of particular underlying values. For example, the longstanding pattern in special education toward integration is indicative of the value of equality. Values are realized (actualized) in public policy through incremental steps which form historical patterns. The identification of these patterns is a means by which to verify the values that drive a given policy system. Therefore, when dealing with policy governed by legislative intent, legislative history is essential to a value-critical understanding. (For an overview of the legislative history of Vocational Rehabilitation and Special Education see Figure 1).

Findings

The value of equality has shaped the legislative history of special education. The special education movement was based upon a vision of

Figure 1:
THE LEGISLATIVE HISTORY OF SPECIAL EDUCATION AND VOCATIONAL REHABILITATION


Rehabilitation
Special Education
PL 99-506 1986
Transition
PL 99-457 1986
PL 98-221 1983
Transition
PL 98-199 1983
PL 97-35 1981
PL 95-602 1978
EHA Amendments PL 95-49 1976
PL 94-230 1976
PL 93-516 1974
PL 93-112 Section 504
PL 94-142 1975
REHAB. ACT PL 93-112 1973
PL 93-380 1974
PL 91-610 1970
P.A.R.C. & Mills 1971 + 1972
PL 90-391 1967
PL 91-230 1970
PL 90-99 1967
PL 89-333 1965
PL 89-750 1966 EHA
PL 86-624 1960
PL 86-70 1959
PL 85-198 PL 85-213 1957
PL 84-937 1956
PL 89-313 1965
PL 89-10 1965 ESEA
PL 83-565 Voc. Rehab 1954
PL 81-874 PL 81-815 1950
PL 78-113 1943
Smith-Fess PL 66-236 1920

equality fashioned by the civil rights movement of the early 1960s. The essence of this vision was equality of opportunity and integration into the mainstream of American life. As early as 1965, mainstreaming and due process were on the special education agenda as operating principles of equality. It took 10 years before these operating principles were embodied in policy in the form of legally mandated education services for children with handicaps.

The force behind this drive toward equality was the contention that education was a basic human right, that *all* children, regardless of any exceptional characteristic, were morally entitled to an appropriate education. This was, in essence, the civil rights vision; basic human rights were being denied to particular minorities and these rights needed to be guaranteed by law. The *moral* entitlement to education needed to be transformed into a *legal* entitlement for children with handicaps.

Two court cases were instrumental in transforming the right to education into a legal entitlement: Pennsylvania Association for Retarded Children (PARC) v. Pennsylvania and Mills v. the District of Columbia (Levine & Wexler, 1981). The basic argument in these cases was that the state and the District were ignoring their constitutional obligations to provide an education to all children. If education was compulsory by state law, then, under the Due Process clause of the 5th Amendment and the Equal Protection of the Laws clause of the 14th Amendment, *every* child was legally entitled to an education. Education for all children with handicaps was a constitutional right.

Through these court decisions the value of equality was transformed from a moral to a legal right. These decisions provided a constitutional basis for the legislative mandate to serve all children with handicaps provided by P.L. 94-142. In terms of the value-critical approach, the transformation from a moral right (value of equality) to a legal entitlement to education (operating principle) has resulted in a very large increase in the number of those receiving a basic social good -- education (outcome).

Concern for transition is the latest development in the actualization of the value of equality in special education. Equality of opportunity is being extended beyond the schools into the labor market.

On the other hand, at the inception of vocational rehabilitation and continuing to underlie its policy is the value of efficiency, an overarching value of maximizing aggregate utility. The cornerstone of federal disability policy has been income maintenance; an income floor has been viewed as a moral right. In the overall context of federal disability policy, vocational rehabilitation has been viewed as a cost-reducing mechanism, as a way to reduce the public costs of income transfer to persons with disabilities (Haveman, Halberstadt, & Burkhauser, 1984).

This value of efficiency manifests in the form of the operating principle of eligibility criteria. Eligibility for rehabilitation services is primarily based upon two criteria: (a) evidence of disability, and (b) rehabilitation potential. Considering the costs of vocational rehabilitation, it is more "efficient" to serve only those with reasonable employment potential than to include all individuals with disabilities, regardless of the severity of their handicapping condition. The outcome of this policy has been the rejection of hard cases in favor of easier ones, with the result that a limited segment of the handicapped population is being served. Whereas an income floor is viewed as a moral entitlement, vocational rehabilitation is not. This system is summarized below.

Value----------------Operating Principle---------------Outcome

efficiency----------eligibility criteria------select population served

However, since the enactment of P.L. 93-112, there has been a significant trend toward equality, the recognition of vocational rehabilitation as a basic right. In fact, P.L. 93-112 mandated that, not only should individuals with severe disabilities be given equal consideration, but service delivery to such individuals should be the first priority. This policy has resulted in a significant increase in the number of individuals with severe disabilities who receive rehabilitation services. The percentage of individuals with severe disabilities being served has increased yearly since the implementation of P.L. 93-112. In fiscal year 1982, more than 50% of those receiving rehabilitation services were severely disabled (House Report 98-137, 13537, 1983). In terms of the value-critical approach, this development can be summarized as follows:

Value------Operating Principle-------------------Outcome

Equality-----First Priority-----Increased service to severely handicapped

However, in spite of this trend toward equality and its resultant services to individuals with severe disabilities, the value of efficiency is still operative. Although the percentage of individuals with severe disabilities receiving rehabilitation services has increased yearly since 1974, the number of individuals with both severe and nonsevere disabilities receiving rehabilitation services has steadily declined (House Report 98-137, 13537, 1983). Given that it costs two to two and a half times the amount to rehabilitate individuals with severe disabilities, in order to serve a large segment of both the severely and nonseverely disabled population, a substantial increase in federal funding would have to be appropriated.

If funding is only moderately increased, and services are provided as a first priority to individuals with severe disabilities, then the percentage of those with severe disabilities being served will increase, but the total number of individuals receiving services will decrease. As a result, approximately one in twenty persons with disabilities eligible for services cannot be accepted into rehabilitation programs (House Report 98-137, 13537, 1983). If Illinois is representative, it appears that the situation has worsened. Presently there are 14,000 eligible individuals on waiting lists for rehabilitative services in the state of Illinois.

Two earlier versions of P.L. 93-112 (HR.8395 and S.7), the Act that initiated the equality movement in vocational rehabilitation, were vetoed by Richard Nixon (1972) primarily on the grounds that they were "fiscally irresponsible." The objection here was that a substantial funding increase necessary to support the equality provisions of the Bill would entail redirecting funds from defense, for example, or an increase in taxes, which Nixon vowed not to enact (sound familiar?). In other words, substantially increased funding, even though it would help many individuals with disabilities, would not maximize the aggregate utility of the citizenry. In Nixon's (1973) words, it "would be a massive assault upon the pocket books" of the people (P. 302). Thus, on the grounds of efficiency, the funding necessary to support full scale equal access to rehabilitation services was not justifiable; it would not maximize aggregate utility.

Nixon later signed into law a bill (HR.8070 becoming P.L. 93-112) that while mandating equality did not give it sufficient financial support. A Bill which was objected to by dissentors in Congress on the basis of its first priority provisions. The minority predicted that the equality provisions would have the effect of "significantly impairing the efficient delivery of services (House Report 93-244, 13020-2, p. 61)." These dissentors recognized the conflict between equality and efficiency inherent in P.L. 93-112, a conflict that would bar many individuals from adult services. Their solution however, was not an increase in funding, but a rejection of equality.

Service to efficiency continues to conflict with equality in vocational rehabilitation policy. For example, in his statement signing P.L. 99-506 into law (Rehabilitation Act Amendments of 1986), Ronald Reagan (1986) wrote: "Although I have reservations about the potential costs of this bill (HR. 4021) for the Federal government, I support the important programs authorized by the Rehabilitation Act (p. 1420)." This statement embodies the conflict between equality and efficiency in rehabilitation policy. Equality is worthy of support, but at what price?

As discussed above, the result of this conflict is that a higher percentage of individuals with severe disabilities are receiving services, but the total number receiving services has steadily declined. From a value-critical perspective, this situation can be summarized as follows:

Value	Operating Principle	Outcome
Equality	First Priority	increased service to severely handicapped
Efficiency	Funding Ceilings	decreased total being served

This situation has serious implications for transition. If 200,000 to 300,000 youths with handicaps exiting public education each year are in need of adult services, and approximately one in twenty adults eligible for services are receiving them, it is easy to see that many youths with handicaps will not receive rehabilitation services.

To date, federal transition policy has focused on the development of models for providing transitional rehabilitative services to youths with handicaps (34 CFR Part 376). Considering the number of youths with handicaps exiting public education each year, this commitment represents an incremental adjustment. A widespread transitional rehabilitation service effort reading a significant portion of this population would require a massive federal commitment.

As special education and vocational rehabilitation interact, demands for meeting equality in the latter will increase. Clients in the special education system are accustomed to an enforced legal entitlement to social services. With the legitimization of transition as a federal policy concern, clients will carry their expectations of legal entitlement into the adult service system, where a high percentage will meet waiting lists or inadequate services.

The courts have a prolific history of being major actors in securing and enforcing legal entitlements to social goods (Jensen and Griffin, 1984). As the transition initiative unfolds on the state and local level, one likely scenario is a proliferation of litigation demanding the enforcement of the legal entitlement to rehabilitation services. In fact, a precedent has already been set by the Oklahoma Supreme Court.

Widespread litigation would greatly strain the rehabilitation system. It would pose an unsolvable dilemma for state and local rehabilitation agencies: court mandates that are not achievable at current funding levels. Political and constitutional pressure would be brought upon the federal government to remedy this situation, eliciting two possible responses:

(1) Congress authorizes a substantial increase in rehabilitation funding which allows a significant increase in those receiving adult services. This increase in funding coupled with a focus on transition

results in a high percentage of youths with handicaps making a successful transition into adult services and eventually into competitive employment.

(2) Due to the impending budget crisis, the Congress cannot appropriate a substantial increase in funding. Instead it adheres to the present incremental strategy of model transition projects and limited dissemination. Very slow progress is made toward achieving the goal of widespread competitive employment for youths with handicaps. In this case the Congress side steps the courts for political reasons.

Conclusion

The task of insuring employment for youths with handicaps is complexified by the fact that it has two dimensions: individual and social. The individual dimension has to do with the preparation of the individual for employment. This is a task of economic socialization conducted by schools and adult service providers. Primarily the focus of the transition initiative has been on this dimension. In fact, special education and vocational rehabilitation as a whole are primarily focused on individual preparation.

The second dimension is social. This dimension transcends the individual, encompassing the social structures that govern the labor market. The employment initiative of the 99th Congress was designed to impact this social dimension by removing work disincentives and by creating incentives in the labor market for the increased employment of individuals with disabilities. The equal access/affirmative action provisions of earlier vocational rehabilitation legislation (P.L. 93-112) discussed above were also acting on this social dimension.

The primary focus of this paper has been on the impact of federal policy on the individual dimension, although we have discussed the social dimension in terms of equality and affirmative action. Concerning both of these dimensions we have found that there exists a fundamental conflict in the transition policy system between the values of equality and efficiency. Regarding the individual dimension, it is likely that the courts will be mobilized to enforce the legal entitlement to equality in vocational rehabilitation overriding the conservative value of efficiency. Whether court mandates can be implemented however is another question.

Perhaps, the Congress will have the political will to support equality in relation to transition. The more likely scenario, however, is that the Congress, due to budgetary constraints and ideological commitments to efficiency, will not provide the funding necessary to support a widespread rehabilitative effort.

In this case the burden of transition will fall upon the school system. Given present conditions, reliance upon the adult service delivery system must be minimal. Youths with handicaps exiting public education must be adequately prepared to assume competitive employment. The achievement of this objective is contingent upon the reexamination of high school special education curricula. If transition to competitive employment is to be widespread among youths with handicaps exiting public education, vocational education for such youths must become a priority.

On the social dimension, building bridges from school to work for youths can be greatly enhanced by building bridges between institutions, special education and employers. Greater involvement of employers must be sought and reinforced. Steps should be taken to inform employers of tax incentives for hiring individuals with handicaps.

In the face of the conflict between equality and efficiency in the transition policy system, special education must assume the responsibility for transition. For the vast majority of youths with handicaps reliance upon the adult service system as an intermediary link in transition must be minimal, at least in the near future. Court action to secure adult services will probably increase to a large extent, but whether it can be translated into change in the short run is questionable given the political and fiscal climate. The battle for equality in education for children with handicaps has been won; the extension of this battle beyond the schools is just beginning.

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5. Successful and Unsuccessful Placement of Secondary Students into Competitive Employment

Laird W. Heal

One of the economic facts of life in the United States is that minorities tend to be discriminated against in the labor market. Both employment rates and wages are lower for minorities than for the population at large. These facts hold for women (Komarovsky, 1973), Blacks and Hispanics (Cain, 1984, U.S. Department of Labor, 1982), and immigrant Southeast Asians (Hirschman & Wong, 1981). Similarly, many individuals with mental retardation are either unemployed or underemployed. Indeed, the U. S. Commission on Civil Rights (1983) reported that 50 to 75% of adults with handicaps in the United States are unemployed. Although this figure may be exaggerated (cf. Conley, 1973), the fact remains that a large number of individuals with mental retardation are not encouraged to contribute to their own economic independence nor to fulfill societal expectations for employment.

Loss of human resources and individual stories of unfulfilled promises prompted Will (1984) to encourage secondary transitional service development throughout the United States. To date, more than 200 model programs have been funded by the Office of Special Education and Rehabilitative Services (OSERS) to stimulate the development of model programs that focus upon improved training for employment for high school students as well as improved postsecondary educational opportunities that will lead to employment outcomes. The purpose of this paper is to report on several individual cases that illustrate the efforts of these model programs to place students in jobs before they exit secondary special education.

Participants in the study were asked to select a student from their model program who had been successfully employed and to match him or her with a very similar student who had been terminated from an employment site. The specific purpose of this study was to identify variables that appeared to influence the successful transition from secondary special education school to competitive employment.

Method

The study compared the case histories of pairs of high school students with mental retardation who had been placed into competitive employment. One student in each pair had been successfully employed for at least six months; the second student had lost his or her job within this same time period. A matched pairs analysis identified student characteristics and employment conditions that were associated with these placements.

Sampling

Recruiting letters (each of which include a stamped, self-addressed return envelope and a one-page agreement-to-participate questionnaire) were mailed to 112 project directors in February 1986, and to 29 newly funded model programs in April 1987. Thirty-eight of the recipients agreed to participate, 23 of whom actually participated. These 23 model programs submitted 29 pairs of cases, 23 of which met the criteria for inclusion. Five pairs of cases were not included for the following reasons: one successful student worked only 2 months, another worked for only $1.70 per hour. Two unsuccessful students worked more than six months before losing their jobs, and a third was never placed.

Procedure

In February 1986, and again in April 1987, project directors were asked to participate in this case study project. Those who placed students in competitive employment and expressed an interest in participating in the study were sent a packet containing instructions and a case study checklist. The project director was asked to complete case studies on each of a pair of students who had been matched as closely as possible for sex, age, and general ability. Although closely matched, students of each pair were to differ in that one was to have been successfully placed into competitive employment and the other was not. "Success" was defined as paid employment for at least 10 hours a week at minimum wage or better, funded by the employer, and lasting at least six months. Each case study was completed by a project employee who knew the student well. The subjects were matched for these variables in order to control (neutralize) for the influence of these variables on the outcome of the placements and thereby to emphasize characteristics of the individual and the placement site that were critical for success.

Instrument: Case Study Checklist

Each case study was based on a two-page set of instructions and an 11-page case study checklist. The checklist contained five sections. Section A focused on student characteristics, such as age, gender, ethnicity, adaptive and maladaptive behavior, educational history, employment history, and personal advantages or disadvantages aside from any handicaps. Section B focused on the student's current housing and daytime services, the neighborhood environment, and the type of community, especially its economic characteristics. Section C addressed model program training and employment characteristics. Also featured was an analysis of the influence played by program personnel in the training and placement process. Section D included an analysis of the type of support that was offered to the target employee after placement, including an analysis of incentives and disincentives. Section E included a summary of the placement and reasons for success or failure.

Characteristics of Participating Projects

A total of 17 model programs completed case studies on 23 matched pairs. The characteristics of these model programs were tabulated by the second author. These 17 projects were located in 10 states and the District of Columbia, including Arizona, California, Illinois, Maryland, Minnesota, Missouri, New Mexico, New York, Oregon, and Virginia. Eight of the 17 model programs were located in cities, seven of which had populations of 100,000 or more. The other nine model programs spanned at least part of a county, and two model programs spanned more than one state.

Model programs represented various types of service agencies, including nine secondary schools or local education agencies, five community colleges or universities, a community education rehabilitation agency, a state agency, and several private nonprofit agencies.

These 17 model programs dealt directly with a variety of individuals, including parents, agency personnel, business employees, teachers, and project staff. An average of 178 students were reported to be directly impacted (range = 24-800), and an average of 261 students were reported to be either directly or indirectly impacted (range = 0-1,245).

More than 75% of the model programs reported written objectives that focused upon assessing students, placing students into competitive employment, providing vocational training or counseling, providing post-employment support, and training employment-related staff. Thirteen of the model programs reported serving students with learning disabilities and mental retardation. Besides these two handicaps, only physical impairments were targeted by more than half of the 17 responding model programs.

Responses to a question about the local placement community indicated that education, retail, and service industries were more prevalent than manufacturing and wholesale businesses, and that agriculture, construction, and government were not well represented in the local placement community.

Secondary Special Education Students

All students included in this study were mentally retarded. In addition, ability levels were reported for 12 pairs. Based on the American Association on Mental Retardation Classification scheme (1984), the ability of different pairs ranged from severe mental retardation to borderline mental retardation. The two members of a pair were always matched by ability level.

Table 1 reports the means and standard deviations for age, education, years of special and regular education, and neighborhood quality ratings of successful and unsuccessful students as well as the frequencies for gender and ethnicity. The adequacy of matching is supported by t-tests and X^2 tests for paired samples. Successful and unsuccessful students did not differ on any of the variables used to match them. Examination of students' training programs, home environments, and day activities also reflected no significant differences. Also, because matched pairs came from the same model program, they were matched on a broad array of socioeconomic and experiential characteristics. In short, members of each pair were extremely well matched.

Results

Placements and Decisions

Table 2 displays job placement types for the 23 students who were placed successfully and the 23 students who were placed unsuccessfully. These profiles were surprisingly similar for the two groups of subjects.

Table 1.

Means, Standard Deviations, and Number of Successfully and Unsuccessfully Placed Students for Age, Years of Special and Regular Education, and Neighborhood Quality, and Frequencies for Ethnicity and Sex.

	Placements						
	Successful			Unsuccessful			
	N	M	SD	N	M	SD	t^a
Age	23	21.91	5.53	23	22.48	5.52	.49
Years of School							
Special	11	11.00	4.80	11	10.63	5.04	.45
Regular	12	2.42	3.75	12	1.58	3.29	1.05
Neighborhood ratings	22	3.45	1.74	22	3.32	1.62	.18
							$X2^a$
Ethnicity							
Black	6			6			1.11
Hispanic	3			3			
Caucasian	14			13			
Sex							
Female	10			13			.55
Male	13			10			

[a] Successful and unsuccessful cases did not differ significantly on any of the tabled variables, p .2, two-tailed.

Table 2.

Job Placements of Successfully and Unsuccessfully Placed Students (n=23 pairs)[a]

	Successful	Unsuccessful
Food Service	9	8
Health-related	2	0
Automotive	2	0
Hotel/Motel	4	5
Office	0	2
Manufacturing	1	0
Nursery	0	1
School	0	1
Preschool	0	1
Clothing (stock person)	0	1
Several named	3	2
Not reported	2	2
Total	23	23

[a] Entries represent responses to the following questions:

1986, Question E4: "John was selected for placement at _______."

1987, Question E5: "Describe the job on which _______ was placed."

Although the numbers were too small to reach statistical significance, it is interesting to note that all three placements in school settings (refer to nursery, school, and preschool categories) were unsuccessful, whereas the two placements in health-related and the two in automotive (service station) settings were successful.

Table 3 shows the percentage of total influence attributed by the respondents to each of several change agents in the training and placement process for the successful and unsuccessful placements. The profiles of influence were similar for both groups. Looking across both successful and unsuccessful placements, preplacement training was attributed 16.50% and 17.04%, respectively, to the total influence. In both groups, counseling and training during placement together accounted for about a third of the total influence. The on-the-job supervisor and the employer, taken together, were given credit for about 12 to 14% of the total influence in the training and placement process. One might question the balance that attributes more than 50% of the influence to the transition education agency (preplacement training, counseling, and training during placement) and less than 15% to the employer (on-the-job supervisor and employer), because support for the placement ideally is transferred to the employer by the transition agency. Another point of interest in Table 3 is the substantial influence of the families of the successful students (10.2%).

Comparison of Successful and Unsuccessful Cases

Tables 4 through 6 report the results of efforts to determine why one student is successful and another unsuccessful. Table 4 shows the percentage of support attributed to each of the contributors in placement success. The most striking feature of this table is the similarity of the two profiles. The highest attributions are to transition agency follow-up

Table 3.

Percentage of Influence Attributed by Respondents to Each of the Agents in the Training and Placement Program (n=22 pairs)

Agent	Placement				
	Successful		Unsuccessful		
	Mean	SD	Mean	SD	t^a
Intake	6.36	7.74	6.36	7.59	0
Preplacement Training	16.50	11.75	17.04	14.61	.19
Counseling during Placement	16.59	17.16	14.23	12.34	.74
Trainer(s)	17.45	17.58	19.64	17.70	-.69
Supervisor	3.64	7.27	5.91	10.54	-1.12
Board	.54	1.50	.45	1.47	1.00
Family	12.23	10.47	8.18	8.67	1.65
Advocate	3.04	4.10	3.32	5.42	-.33
Medical doctors	4.54	7.61	3.64	6.76	.70
Community services	0	0	1.82	5.88	-1.45
Group home	.91	4.26	1.14	3.76	-.44
Community college instr.	1.00	3.25	1.36	3.51	-.78
High school admin.	1.82	8.53	.09	.43	.95
Employer	7.68	11.78	8.41	13.04	.22
Transition team	2.95	7.66	3.86	9.50	-.62
Other	4.73	11.27	4.54	12.14	-

[a] df = 21, $t_{.05}$ = 2.08, two-tailed; no difference was statistically significant.

Table 4.

Percentage of Support Attributed by Respondents to Each of the Contributors to Placement Success (n=22 pairs)

	Placement				
Source of support	Successful		Unsuccessful		
	Mean	SD	Mean	SD	t[a]
Student's ability	19.77	12.00	11.73	12.74	2.52*
Peers on the job	6.86	7.45	5.45	8.15	.70
Supervisor on the job	16.14	9.12	18.95	14.97	-.96
Transition agency follow-up	16.59	13.49	27.50	25.11	-2.72*
Family support	8.18	9.20	11.14	10.68	-1.08
Match to job	13.41	8.22	4.77	6.26	3.57*
Luck	2.27	4.56	.91	2.50	1.37
Personnel at work site	3.50	5.60	2.27	4.81	.75
Personnel at transition agency	4.27	6.64	6.14	12.81	-.88
Group home house parents	-	-	.45	2.13	-1.00
School counselor	-	-	.91	4.26	-1.00
School principal	1.36	4.68	1.14	5.33	.15
Behavior program	1.36	3.84	1.59	3.58	-.19
Other	6.27	10.16	7.04	13.68	

[a] df = 21, $t_{.05}$ = 2.08, two-tailed

[*] p .05

and supervisor on the job. Fairly high attribution is also made to student ability, especially for those who were successful. Despite the similar profiles for successful and unsuccessful cases, the respondents were willing to attribute only about 2% of the success to luck.

Notwithstanding these similarities, there were significantly different attributions of support for the successful versus unsuccessful students in three areas. Significantly more support was attributed to both student ability and job match for successful placements, but significantly more support was attributed to transition agency follow-up for unsuccessful placements. This combination of supports suggests that extra staff time is spent with the more difficult placements.

Table 5 reports the respondents' ratings of students' attitudes and performance difficulties in their job placements. There are clear differences in these ratings. Students in successful placements were rated as having fewer negative and more positive attitudes than their peers in unsuccessful placements (p .05). Successful students had far fewer performance difficulties than their unsuccessful peers. In the unsuccessful group, performance difficulties are associated with attitude almost as frequently as ability.

Table 6 shows the reasons for placement success or failure given by the respondents. When they were asked the question directly, respondents had very clear ideas about why placements succeeded or failed. A significantly higher proportion of the successful student work placements were seen to have good support, a good student attitude, a good job match, a creative placement specialist, supportive co-workers, a team effort by those involved at school and at work, and a supportive employer or job supervisor. It is also interesting to note that respondents were far more willing to give

Table 5.

Ratings of Students' Attitudes and Performance Difficulties
(n=24 pairs)[a]

	Placement	
	Successful	Unsuccessful
Attitude Ratings		
Poor*	0	8
Neutral	1	1
Positive*	10	3
None reported	13	12
	24	24
Performance Difficulties		
Job conditions	1	2
Attitude*	1	8
Social skills	3	1
Making decisions	0	1
Production rate	4	6
Production quality	0	2
No opportunity (Aborted placement)	-	1
Other problems	-	2
Total Number of Problems*	9	21

[a] 1986, Question E5: On the job, John ________.

1987, Question E7: Describe _____'s performance on the job regarding his/her assigned tasks.

1987, Question E8: Describe _____'s attitude on the job.

*p .05 by a Fisher Exact Test

Table 6.

Reason for Placement Success or Failure (n=23 pairs)[a]

	Successful	Unsuccessful
Support (interference) from home	11	6
Good (inadequate) support [follow-up]*	15	5
Good (poor) student attitude*	18	8
Good (poor) student ability	11	5
Shortage of business	0	1
Good (poor) job match*	13	3
Qualified for SSDI	0	2
Job schedule changed	0	1
Creative, persistent placement specialist*	8	1
Employers incentive	7	1
Supportive co-workers*	9	1
Team effort*	9	0
Supportive employer and/or supervisor*	16	1
No reason given	1	0
Total number of reasons listed	118	35

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[a] 1986 Question E8; 1987 Question E10: "The placement has (succeeded, failed) because ___________."

*p .05 by a one-tailed Fisher Exact Probability Test reasons for success than they were to give reasons for failure. The 23 successful cases each had an average of five reasons for success, whereas the 23 unsuccessful cases each had fewer than two reasons listed for their failure.

Benefits of Placement

Finally, Table 7 shows the benefits of placement for both successful and unsuccessful cases. As with the reasons for success, respondents were far more willing to list benefits for successful students (N=90) than for unsuccessful students (N=42). In terms of statistical significance, the successful students were more likely to have improved the transition agency's chances for more job placements, had provided themselves permanent long-term employment, and had earned increased independence as a result of their success. Gains in self-confidence and positive work experiences were also cited as benefits in successful cases.

Discussion

The present study was undertaken to identify factors associated with successful employment of high school students with mental handicaps. Several findings of this research are noteworthy. First, student attitude appears to be a more important ingredient in successful employment than student ability. Both the within-pair student differences (Table 5) and the "reasons for success and failure" (Table 6) indicated that student attitude differed significantly in successful and unsuccessful students. This finding is consistent with a large literature, recently reviewed by Greenspan and Shoultz (1981). Second, the match of the student to the job was noted as important in both the "sources of support" (Table 4) and "reasons for success or failure" (Table 6). Although many have argued that such a match is important (Martin, 1986), the argument is rarely supported

Table 7.

Benefits of Placement[a]

	Placement	
	Successful	Unsuccessful
Improved agency's chances for more placements[*]	13	3
Permanent, long-term, employment[*]	11	1
Increased revenue	9	5
Independence for the student[*]	15	3
Improved student self-concept	13	8
Experience, learning self-confidence[*]	15	7
Enjoyable experience for the student[*]	9	3
A chance to prove worthiness, to assess abilities	11	9
Other benefits	3	3
Total number of benefits listed	90	42
Total number of cases	23	23

[a] 1986, Question E6; 1987, Question E9: "The benefits of placement have been ___________."

[*] p .05 by a Fisher Exact Test

by empirical evidence. Third, there was a striking inconsistency among the four tables in dealing with reasons for placement success (Tables 3 through 6). For example, the job coach, co-workers, and "the team" were reported as important for success in Table 6, but they were not seen as supports for the placement in Table 4. On the other hand, extensive attention from the transition agency was correlated with placement failure in Table 4, but no corresponding effect was seen in Table 6. This lack of internal consistency is disconcerting. Although Table 3 ("placement influences") can be interpreted as evidence for well-matched pairs and Table 5 is limited to student characteristics, the inconsistency of Tables 4 (support for placement) and Table 6 (reasons for success or failure) cannot be so easily dismissed.

The comparison of successful and unsuccessful student job placements reported in this study is the result of a unique opportunity to analyze several distinct yet similar data bases across the United States. Results indicate that in a variety of communities across the nation, model programs succeed in placing students. The most important elements in this success appear to be team effort, involving a solid and energetic transition education staff as well as employer support and employment supervision, and a sensitive match of the student and the job. The importance of the efforts of the transition team appear to be about five times that of employer. This result is particularly worthy of additional research because it suggests that actual placements based upon systematically developed objectives and a good job match may result in higher numbers of high school students with disabilities making a successful transition from school to work.

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6. Secondary Analyses of Educational and Transitional Services

Delwyn L. Harnisch

The two main objectives of this research program are first, a series of secondary analyses of the extant data sets that focus on transition issues and result in a statistical digest, and second, the compilation of an annotated bibliography and literature review on the independent living, employment, and educational outcomes of youth in transition.

These activities have been an attempt to develop an integrated research program that examines the various aspects of transition from high school to the community for youth with handicaps. Additionally, we have been guided in this research by the idea of establishing a means of providing an information base that can facilitate the planning and delivery of services to students in transition. Such an information base relies upon the notion that there are specific aims and goals of transition that can be articulated and achieved.

The idea of a constant information flow is shown in that many of the analyses undertaken for the Digest on Youth in Transition (Harnisch, 1988; Harnisch, Lichtenstein, & Langford, 1986) are derived from the literature reviewed for the Transition Literature Review: Educational, Employment, and Independent Living Outcomes (Harnisch, Chaplin, Fisher, & Tu, 1986; Harnisch, Fisher, Kacmarek, & DeStefano, 1987); that is, there is an iterative system operating that allows the discovery of issues in the literature review process that can then be applied to the analyses of the extant data sets. The process continues as the new statistical findings are re-entered into the system and shared through research dissemination procedures in publications and presentations.

Literature Review

This research has maintained a constant focus on the transition ideals set out by Will (1984) and reformulated by Halpern (1985) across a range of the experiences that youth with handicaps will face after leaving secondary education. These researchers attempt to place into perspective the various use patterns that can be established for service delivery systems. Will's original conceptualization relied very much on the place that employment occupies in the transition planning process, whereas Halpern extends this emphasis to include the social and living environments of the individual.

Within the domains identified by Will (1984) and Halpern (1985) there is a need for certain types and levels of skills to be present for the individual to function at the adult level. An example of this is a situation where the focus extends beyond the influence that employment will have on the person's life. The notion is that there are wider concerns of independent living that the person with a handicap will face when moving from the more protective high school environment.

The conceptualizations of independent living vary greatly in the literature on the transition of youth with handicaps. These variations occur with the type of handicap being studied, the severity of the handicaps, and the types of interventions being promoted. Much of the conceptualization has relied on the study and preparation of persons with mental retardation for life in the general community, thus focusing on a set of specific functional capabilities.

Rusch, Chadsey-Rusch, White, and Gifford (1985) have identified nine behavioral areas in which to assess independent living for persons with mental retardation: (1) personal hygiene, (2) self-care skills, (3) food management, (4) social behavior, (5) communications, (6) home living skills,

(7) functional academics (time and money), (8) recreation and leisure, and (9) community awareness and utilization. In a similar manner, Kregel, Wehman, and Seyfarth (1985) extended the necessary skills from factors such as grooming, cooking, and home management to other areas of life, including generic community services (mobility and shopping) and ability to integrate successfully into a community.

Clowers and Belcher (1979) provide a wider set of criteria for independent living, according to which the measurement of a number of independent living outcomes would replace competitive employment and educational preparation for employment, which they see as unnecessarily restrictive and not fully representative of the domains within which an adult must function in our society. Clowers and Belcher propose four categories over which to judge independent living: (a) community mobility, (b) residence, (c) self-advocacy and self-management, and (d) social-leisure activity.

Stoddard (1978) places the growth of independent living into developmental perspective in his summary of such a life:

> When those active in the disabled movement use the term "independent living," they are referring to their ability to participate in society--to work, have a home, raise a family, and share in the joys and responsibilities of community life. "Independent living" means freedom from isolation or from institution; it means the ability to choose where to live and how; it means the person's ability to carry out activities of daily living that nondisabled people often take for granted (1978, p. 2).

To explain the broad nature of independent living, a definition has been proposed (Harnisch & Chaplin, 1986; Harnisch, Chaplin, Fisher, & Tu, 1986) that covers skills in seven areas: (1) self-advocacy and maintenance skills, (2) living arrangements, (3) education, employment, and training, (4) mobility and transportation, (5) generic community services, (6) community interaction, and (7) recreation and leisure. The primary goal in developing this definition was to seek ways in which autonomy and personal control could be maximized. It is an educational model relying on the theory of empowerment (Rappaport, 1981; 1987) whereby the groups at risk can be taught the skills that will facilitate their control over their own fates.

The Harnisch, Chaplin, Fisher, and Tu (1986) definition focused on the identification of skill domains. This relies on the idea that there are a number of skill areas that are crucial to the ability to function in our society, and that these skills can be taught and learned. It is a developmental concept that promotes the notion that the person must have opportunities to face the tasks of educational and social growth in order to achieve the full level of societal membership of adulthood.

The impact of social factors on the outcomes for youth with handicaps has been examined by Fisher and Harnisch (1986, in press), who found that the youth with handicaps perceived that their parents and teachers did not expect them to achieve as highly as did their nonhandicapped peers. In this way, they were being limited in their growth by the messages that were received about what they should be able to do, rather than looking at their actual capabilities.

The implementation of the goals of providing information within the parameters of this conceptualization of independent living is the framework for our work. Although each of our major objectives appears to be quite separate, the theme that we have put into them is the same--the understanding of the transition process and the discovery of ways to maximize its success for youth with handicaps.

Method

The methods vary according to the two objectives for which we have responsibility, and the data sources that are to be analyzed. For the

Transition Literature Review, articles that fall into the criteria of empirical transition studies on persons in the approximate age range of 16 to 24 years are gathered and reviewed. The review encompasses the specific outcome focus of each paper, methods used, the specific handicapping conditions in the article, and an abstract of the paper.

Figure 1. Sample Entry Session: Screen View

```
Record No.    86

ACHE_PRI      3
IN_DATE       06/24/86
MDN_TYPE      2
AUTHOR        Sutter, P., Mayeda, T., Yanagi, G., & Yee, S.

PUB_YEAR      1980
PUB_MONTH
TITLE         Comparisons of successful and unsuccessful community placed-
              mentally retarded persons.

JR_AG_PB      American Journal of Mental Deficiency, 85(3).

PLACE_PUB
PAGE_NO       262-270

LD            F
SI            F
MR_MI         T
MR_MO         T
MR_SP         T
SED           F
DEAF          F
ORTHO         F
HI            F
VISU          F
MULTI         F
BLIND         F
DIS           F
LEVEL         ST (HI)
ACHE_ED       F
ED_MEMO
ACHE_EMPLY    F
EMPLY_MEMO
```

Review of the articles is completed with the use of a specifically designed worksheet that allows the reviewer to circle alternatives and to complete the blank spaces for other information (see Figure 1). The information entered onto these worksheets is then transferred into the computer files for the dBASE III program. The dBASE III execution program has been written so that the variable structure on the computer screen matches that of the review worksheet.

Use of the dBASE III program facilitates much of the review literature analysis and the production of the annotated bibliography. It allows the selection of the articles for each of the specific outcome areas, specific handicapping condition (see Table 1 for distribution of articles by condition), location of the study, or other factors.

Production of the Digest relies upon the secondary analysis of extant data sets. The main focus has been on the High School and Beyond national longitudinal study (Office of Educational Research and Development, 1986) and the Annual Reports to Congress on the Implementation of the Education for All Children Act (U.S. Department of Education, 1985, 1986, 1987). Work has also been reported on the establishment and analysis of a longitudinal data base for an educational areas consortium in consultation with the Transition Institute.

Statistical analyses have followed up on areas that have been identified as problematic through the Transition Literature Review. In this way, the analyses are aimed at providing further information about the extent of these problems and the actual extent of their impact on the transition of youth with handicaps. A prime example is the continuing analysis of data relating to the definition of independent living developed in the first volume of the Transition Literature Review which has led to the identification of many subdomains of independent living and to a number of significant differences between groups with specific handicapping conditions.

Table 1. Summary of the Number of Articles Catalogued by Handicapping Condition and Outcome Area

HANDICAPPING CONDITION	EDUCATIONAL OUTCOME	EMPLOYMENT OUTCOME	INDEPENDENT LIVING
Learning disabilities	12	13	0
Speech impairments	5	5	0
Mental retardation:			
mild	2	22	5
moderate	0	18	5
severe/profound	0	15	3
Serious emotional disturbance	3	15	3
Hearing impairments and deafness	5	10	1
Orthopedic handicaps	3	16	0
Other health impairments	1	10	2
Visual handicaps	3	7	2
Multiple handicaps	1	10	2
Deaf-blindness	1	4	1
Educationally at risk	2	4	0
TOTAL*	38	149	24

*Does not total 176 because some articles include more than one handicapping condition.

Major Findings

Employment transitions. Utilization of transition information and the building of skills within the individual have been dealt with in the chapters in Volumes 1 and 2 of the Digest. Much of the work has examined the success of transition to employment using data from the High School and Beyond national longitudinal survey (Office of Educational Research and

Improvement, 1986). The main focus has been on the first job that students had after high school and factors that influenced that employment and its outcomes.

The results from the research analyses indicate several important factors that influence the employment status of youth with handicaps. First, the specific handicapping condition seems to influence the employment status, length of employment, hourly earnings, and the number of hours worked per week. Youth with learning disabilities, speech, or hearing impairments had higher percentages of full-time employment than did youth with other specific handicapping conditions. Also, youth with orthopedic impairments or learning disabilities had the highest hourly income.

The other major factor was the dropout or graduation status of the youth with handicaps. In all cases, the youth who dropped out of school early had much lower levels of employment status, were more likely to be unemployed, and earned lower wages. This situation was compounded for youth with handicaps: those who dropped out earned less, had lower status jobs, and had much shorter job tenure than any other comparison group.

Independent living analyses. Although in our society the transition to employment is a highly significant change in one's life, it is only one part of the early adult transition that must be accomplished. As has been indicated by Harnisch, Chaplin, Fisher, and Tu (1986), there are a number of facets of life in which a person must have active skills in order to live as an independent adult. The examination of the level of these skills, how they differ between groups, and how they relate to other factors are reported in the Digest (Harnisch & Fisher, 1988; Harnisch, Lichtenstein, & Langford, 1986).

Using the scales derived by factor analysis procedures, comparisons were made that demonstrated the varying levels of independent living skills among a number of identified groups. When one compared the level of independent living skills of those persons to those without, there were clear differences on many of the derived scales. These differences indicated that those without handicaps generally had higher levels of independent living skills (see Table 2). Such differences were most clearly indicated on the scales measuring career expectations, academic organization, and achievement life-style orientations.

Comparisons between groups of students who reported having specific handicapping conditions demonstrated a wider variation on the levels of independent living skills held. For those who reported having a specific learning disability, scores on many of the derived scales were extremely low compared to the population means, whereas those who reported orthopedic impairments were at or above the population means on many of the scales.

As concrete examples of these findings, those with learning disabilities were well below the means on all the derived scales in the self-advocacy and maintenance domain: computer skills, the utilization of resources, life-style orientation, technological skills, and academic organization. Only subjects with hearing impairments reported lower scores on any of these scales: life-style orientation and academic organization. The students with learning disabilities had the lowest average score (M = 44.47 on a standardized scale with a mean of 50 and standard deviation of 10) of any group on any scale for their career expectations, which was more than .5 of a standard deviation below the population mean.

When one looks at the values recorded for the students reporting orthopedic impairments on the same scales, a very different picture emerges.

Table 2. Independent Living Scale Means and Standard Deviations by Handicap Status

Scale/Factor	Without handicaps (N = 10,232)		With handicaps (N = 4,469)	
	M	SD	M	SD
Self-advocacy				
Computer skills	50.18	10.04	49.59	10.02
Resource utilization	50.31	9.75	49.30	10.65
Technological skills	50.50	9.62	48.85	10.82
Life-style orientation	50.54	9.34	48.77	11.40
Academic organization	50.58	9.60	48.67	10.88
Living arrangements				
Financial support	50.27	9.71	49.43	10.63
Household composition	50.14	10.30	49.67	9.38
Tax exemption	50.08	10.33	49.82	9.33
Adult milestones	50.50	9.85	48.86	10.38
Community integration				
Group participation	49.95	9.96	50.12	10.23
Social roles	49.85	9.91	50.34	10.33
Social activities	49.98	9.95	50.06	10.26
Church participation	49.95	10.03	50.12	10.08
Leisure and recreation				
Extracurricular clubs	49.93	9.97	50.16	10.21
Extracurricular sports	50.01	10.09	49.98	9.94
Education and training				
Work experience	49.76	10.12	50.56	9.85
Career expectations	50.75	9.92	48.92	10.11
Post-secondary education	50.32	10.25	49.27	9.51
Special programs	49.61	9.55	50.89	11.04

Source: High School and Beyond, Second Follow-up of 1980 Sophomores.

On the first four self-advocacy and maintenance scales these students have scores above the population mean, but their scores for academic organization are slightly lower. On career expectations, they are almost .25 standard deviations above the mean. Examining the results for those students reporting health impairments, scores on most of the derived scales were at or near mean values. Scores for the remaining conditions were generally below the means.

As was indicated in the work on employment transitions, the graduation or high school dropout status of students seems to be critical in the successful transition to employment. When this type of comparison was made for independent living skills, there emerged significant differences. Those who dropped out scored lower on almost every derived scale of independent living skills than the graduates, regardless of handicapping status. (See Table 3 for the scores of the groups of these scales.)

Of particular interest are the results based on the derived scales which assessed the career and post-secondary expectations of the dropouts. Scores for the dropouts on career expectations were almost .8 standard deviations below the population mean, whereas both the graduate groups (with and without handicaps) scored at the mean, thus indicating a much lower status of employment. The postsecondary education expectations were approximately .3 standard deviations below the mean for both dropout groups.

When the postsecondary education expectation scores are considered in light of the adult milestone scores, a interesting pattern emerges. For adult milestones, both dropout groups had scores approximately .6 standard deviations below the mean, which indicates that they expected to marry, find full-time employment, have children, etc., at much younger ages than comparison groups. For the graduate groups, those with handicaps were at

Table 3. Independent Living Scale Means and Standard Deviations by Handicap and Graduation Status

Scale/Factor	Dropout				Graduate			
	Without handicaps (N = 1,807)		With handicaps (N = 1,063)		Without handicaps (N = 8,296)		With handicaps (N = 3,338)	
	M	SD	M	SD	M	SD	M	SD
Self-advocacy								
Computer skills	46.49	6.77	46.90	7.53	50.95	10.54	50.44	10.64
Resource utilization	50.44	10.20	48.86	11.08	50.25	9.68	49.41	10.51
Technological skills	46.60	10.85	44.89	12.02	51.35	9.18	50.08	10.21
Life-style orientation	48.67	10.17	46.75	12.81	50.96	9.10	49.43	10.80
Academic organization	47.21	10.51	45.34	11.80	51.35	9.20	49.77	10.37
Living arrangements								
Financial support	47.79	11.28	47.67	11.41	50.81	9.32	49.97	10.42
Household composition	50.82	6.81	50.65	6.83	50.00	10.98	49.36	10.12
Tax exemption	48.84	5.78	48.80	5.86	50.36	11.12	50.14	10.26
Adult milestones	43.45	9.51	44.03	10.13	52.04	9.28	50.40	9.99
Community integration								
Group participation	47.53	8.19	48.10	8.59	50.48	10.26	50.75	10.62
Social roles	52.32	9.92	51.07	10.63	49.33	9.86	50.10	10.21
Social activities	53.63	9.74	52.69	10.07	49.17	9.81	49.24	10.17
Church participation	47.71	7.33	48.43	7.56	50.46	10.49	50.69	10.71
Leisure and recreation								
Extracurricular clubs	49.30	4.81	49.79	6.04	50.07	10.80	50.29	11.21
Extracurricular sports	48.64	5.08	49.05	5.54	50.28	10.86	50.32	10.99
Education and training								
Work experience	51.34	9.34	51.90	9.23	49.39	10.27	50.16	9.97
Career expectations	42.31	8.35	42.05	8.20	52.60	9.33	50.28	9.91
Postsecondary education	47.18	8.30	46.76	7.61	50.97	10.54	50.10	9.90
Special programs	50.72	10.35	52.35	11.95	49.36	9.36	50.38	10.66

Source: High School and Beyond, Second Follow-up of 1980 Sophomores.

the mean, and those without were .2 standard deviations above. We interpret these findings to mean that, although reaching adult milestones indicates a level of independent living, attainment of them at too young an age deprives people of the advantages of further education and limits the options that they will have for advancement later in life. Thus, they are limited by their attainment to a lower level of financial, educational, and employment status.

A number of significant correlations were observed for the derived scales with demographic characteristics. For both the students with handicaps and their nonhandicapped peers, a pattern emerged positively relating computer skills, technological skills, academic organization, adult milestones, career expectations, and postsecondary expectation to high school grade point average, the composite test score, and socioeconomic status. Thus it appears that those with greater skills in these domains may be looking forward to a more rewarding life. Those with fewer skills may be trapped in lower status work and income.

Harnisch, Fisher, and Carroll (1988) have applied the scales to the assessment of the independent living skills of rural youth with handicaps. As was the case for city youth, those with handicaps typically have lower scores on most scales, but the rural youth were below the levels of the city youth (see Table 4). However, the rural youth with handicaps scored higher on a number of the scales which measure social interaction, which may indicate that the smaller communities in which they live are more accepting and supportive of those with special needs.

Table 4. *Comparisons of Rural and Non-Rural Youth With Handicaps on Independent Living Skills*

Scale	M_C	M_R	D	*t*
Computer skills	50.34	49.00	1.34	7.30***
Resource utilization	50.38	48.88	1.50	7.73***
Technological skills	50.14	49.60	0.54	2.73**
Life-style orientation	50.10	49.70	0.40	2.04*
Academic organization	50.14	49.60	0.54	2.85**
Group participation	50.19	49.45	0.74	3.95***
Social roles	50.12	49.64	0.48	2.50*
Social activities	50.08	49.77	0.31	1.60
Church participation	49.70	50.87	-1.17	-5.92***
Extracurricular clubs	49.75	50.73	-0.98	-5.04***
Extracurricular sports	49.80	50.60	-0.80	-4.18***
Financial support	50.16	49.54	0.62	3.41***
Household composition	49.44	51.66	-2.22	-12.29***
Tax exemption	49.82	50.54	-0.72	-4.28***
Adult milestones	50.77	47.74	-3.03	16.18***
Work experience	49.50	51.60	-2.08	-12.15***
Career expectations	50.96	47.54	3.51	17.39***
Postsecondary education	50.44	48.69	1.75	9.07***
Special programs	50.23	49.23	0.91	4.82**

**p* .05 ***p* .01 ****p* .001

Conclusion. The *Digest* has presented a consistent and detailed set of data analyses reporting on the various aspects of transition from high school to the community. To be in line with the frameworks provided for considerations of transition and independent living, there needs to be a flow of information that is readily available to those who make policy decisions and implementation plans. This information should be available both for individuals and for groups, so that departments and agencies can set the levels of funding and service delivery.

The Digest findings indicate a number of ways in which information can be gathered and used in the planning process, from the systematic collection of longitudinal data in the schools to the examination of various outcomes in employment and independent living settings. Such data can then be used to establish the strengths and weaknesses of the existing service and school curricula, and then be used to amend them to provide the best services to maximize the positive outcomes for youth with handicaps in their transitions to the community.

There is a need for transition information and data that are readily available to policymakers, who have a great impact on the lives of people with handicaps and the services that they are to receive. Use of such data should facilitate the development of policies that are aimed at the alleviation of the stress placed on persons with handicaps and the building of true independence.

But it is not only policy planners who need access to this information. Those who work in the service delivery agencies need to be informed about particular clients but must understand also the transition needs of groups with specific handicapping conditions.

In planning service delivery and changes to curricula, special attention must be given to identification of students who are at risk of dropping out. This research has consistently demonstrated that the dropout groups are at the greatest risk when placed into the competitive workforce as well as in the other areas of adult life. By leaving school early they are denying themselves the opportunity to learn and develop the independent living skills that are so critical to success in many areas of adult life.

Transition Literature Review

Findings in the Transition Literature Review are consistent from year to year. The total number of articles analyzed in the first two volumes is 176. These have been analyzed according to their focus on one of the specific outcomes areas--education, employment, or independent living--and entered into the data base of the annotated bibliography. Major findings for each of outcome areas are described below.

Educational outcome findings. Students with handicaps had significantly lower levels of academic achievement, and they had to work much harder to accomplish these levels. They were also found to have lower self-concepts of academic ability, motivation, future expectations, self-esteem, social and academic adjustment, and self-perceptions of attractiveness and popularity. Thus they were not only at a disadvantage in the academic setting, they also perceived themselves as having less academic and social worth.

Postschool and postsecondary education adjustments were difficult for most students with handicaps. Successful transition depends upon the appropriate career and adaptive education opportunities. Placement in special programs appeared to have a positive effect on the academic achievement of many students with handicaps. Finally, members of ethnic minorities were overrepresented in various handicapping conditions and in specific programs.

Employment outcome findings. Persons with handicaps are faced with very high levels of unemployment and underemployment. Those working will usually receive low wages with fewer raises and fringe benefits than their nonhandicapped peers. In the workforce they are most likely to have service, unskilled, or semi-skilled occupations.

Transitional training, supported employment, and competitive placement improve employment opportunities in integrated settings. High school vocational class participation has a positive effect on the wages of those with handicaps. Use of technology and development of placement policies have great impacts upon the improvement in the range of employment available to persons with handicaps. Employers who have rated their employees with physical handicaps indicate that they are at least as good as the nonhandicapped peers and would most likely hire others with handicaps.

Independent living outcome findings. The skills necessary for independent living vary greatly, depending upon the handicapping condition and its severity. Independent living centers play a major role in teaching these skills, as well as in advocacy for those with handicaps and the promotion of decision-making abilities.

The availability of appropriate housing and flexible public transportation are important in the employment opportunities and social interaction of those with handicaps. In order to overcome the present social isolation experienced by many persons with handicaps, there is also a need for the promotion of leisure and recreation activities.

Conclusion. The analysis of articles in the Transition Literature Review provides a clearer picture of the experiences of many persons with handicaps. In each of the outcome areas, the same ideas arise: not enough is being done to assist in the successful transition of many young people from high school to their adult positions in the community. Although the studies provide evidence of successful interventions, usually on a small scale, they are even more useful in identifying those areas in which there is need for a greater focus and much more action.

In each of the outcome areas, there are problems identified that inhibit the transition process. Often the literature gives the idea that certain aspects of the transition problem are being looked at in post hoc fashion. Thus, the young person is in the process of transition, but the underpinnings of the process have not been deal with, which leads to the need for interventions to prevent failure rather than looking at the ideas of building skills during the education of the person so that the skills are in place and useable when the time for the transition comes.

Summary

The articles reviewed and analyses undertaken in this research objective area form an informational base upon which future research analyses will evolve for this team. The first of these projects is the development and refinement of a survey instrument that can be used to measure an individual's level of independent living skills. We will use the information and findings to examine again the data from previous years' work and to study how they have changed during the important transition years. Primary among these is the follow-up of the research on employment transitions of youth with handicaps.

We feel that one of the most significant contributions made by the research and information gathering efforts of the members of research group is the development of resources for others to use when attempting to work in transition issues. By compiling a systematic information base, we believe that we can serve not only as an analysis team for literature and data, but can also make a contribution by providing a form of needs analysis in the identification of the issues of transition.

Although Will (1984) and Halpern (1985) have discussed transition in a general approach, they have not broken it into components that can be handled and researched to provide the best possible aid and services. We believe that compilation of the literature and annotated bibliography and the continuing analysis of independent living domains and component subdomains act to fill in many of those missing gaps. The goals of transition are raised to the array of behaviors and skills that are needed if the youth with handicaps is to function as an adult in our society, and the areas in which the systems are currently not meeting these goals are clearly identified.

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7. Changes in Aim and Activity During Transition Project Operations

Robert E. Stake

During this past year, a questionnaire (Figure 1) designed to obtain local perceptions of issues associated with the evaluation of model demonstration projects was sent to 104 project directors. Eighty-four completed questionnaires were returned. The following is a discussion of the responses to the questionnaire.

The questionnaire addressed three issues: (a) changes that projects experience during implementation, (b) consensus about goals of transition services, and (c) predilection to serve own site versus generalization of services.

Changes that Projects Experience During Implementation

Several questions were included to document project change. Respondents were asked whether there has been change and what caused the change. They were also asked to quantify and describe project changes.

Accommodating Unexpected Problems

The first question regarding project change presented a situational narrative. This narrative depicted a project staff taking unanticipated action to cope with unexpected problems. The narrative was written to convey sympathetic understanding that such problems will be present in projects dealing with special populations requiring individual treatments and cooperation among several service systems. Such cooperation is easy to promise and offer but difficult to provide.

The majority of respondents (78%) agreed that such scenarios are characteristic of their projects. Many of the respondents commented that:

____
Code

Figure 1. **Issues in Evaluation**
Questionnaire for Project Directors

Project staff member Jack has been working in a supermarket placement with Jenny who is 16 years old and has moderate handicaps. Much of her training work is cleaning food containers to be returned to wholesalers. Most of the time Jenny handles the checklist details for her task well, but her social skills are problematic. For example, she stands too close to strangers and startles acquaintances with intimate greetings. Jack spends an unexpected portion of his time working with her social development.

Project director Susan had counted on support from the state vocational agency and has had some, but has found more than a small portion of her time every week needed for maintaining, even repairing, communication with the agency. Not only was this maintenance obligation not identified in the proposal as a task, it was said to be already accomplished, a basis for *beginning* project work. Though Jack and Susan take pride in doing these time-consuming tasks well, they are not comfortable listing them as project accomplishments.

Federal project monitor Howard knows that trouble-shooting is a part of the work of any staff member, but is concerned about the large share of project time for "keeping afloat." Progress is apparent in Susan's project but some stated goals are not being even minimally achieved. Yet the project is rational, vigorous, and admired by most people involved. Is the project to be treated as successful?

1. Do you recognize any similarity in this scenario with circumstances in your own project? ____ Yes ____ No

   Comment ____

   ____

2. If you were to take a full inventory of your project accomplishments to date and held it up to proposal promises, how would they match?

   __ a. Accomplishments diverse, some unexpected, and too numerous to count; goals fully being met.
   __ b. Accomplishments diverse, some unexpected, and too numerous to count; some major goals unlikely to be met.
   __ c. Accomplishments nicely covered by stated goals which are fully being met.
   __ d. Accomplishments nicely covered by stated goals, some of which are unlikely to be met.

3. Please help us understand this matter of discrepancies between what has been promised in the proposal and what is actually being accomplished. Is there a problem in language? In conceptualization? What has your experience been?

   ____

   ____

   ____

4. Imagine a project in a state very far from you is working with a type of youngster and a community unlike your own. It has been said that they have some unusual training method, some student performance measurements and some staff problem-solving strategies. Some people believe this project is really effective. How interested do you think you might be in getting each of the following? (Please consider carefully.)

	Not Interested			Very Interested
a. A video-tape description of the project	0	1	2	3
b. A personal presentation at the next annual meeting	0	1	2	3
c. A sub-contracted evaluation of the project	0	1	2	3
d. A trip to visit the project	0	1	2	3
e. A journal article by an independent researcher describing it	0	1	2	3

5. Which seems more likely to you about the successes the project mentioned above is having?
   - __ a. Success would be based largely on circumstances unique to the situation.
   - __ b. Success would probably generalize to other settings, students, and staffs.

6. Thinking about your own project, please name one aspect which you feel is pretty unique, something contributing much to the success of the project, but something that other similar projects are not likely to have:

   ____

   ____

   ____

7. And also regarding your own project, name one characteristic that is vital to project success, something you feel that almost all projects would have, at least if they worked hard to get it:

   ____

   ____

   ____

8. Was lack of agreement on a definition of "transition services" a problem in getting your project going?

__ a. a hugh problem	Any comment to help us understand
__ b. sometimes	______________________
__ c. not really	______________________

9. Are there differences in viewpoints of transition goals between your project leadership and:

	Yes, major ones	Yes, but minor	No/Not Applicable
a. Project staff	___	___	___
b. Students	___	___	___
c. Voc. ed. Teachers	___	___	___
d. Spec. ed. Teachers	___	___	___
e. School/College Administrators	___	___	___
f. Adult Services	___	___	___
g. Employers	___	___	___
h. Parents	___	___	___
i. Post secondary faculty	___	___	___

10. Looking back, is it reasonable to see differences in viewpoint of transition services as an asset rather than a liability to a project? ___ Yes ___ No

    Comment ____

    ____

11. Do you see *program evaluation activity* as helpful in fostering a "shared vision' of transition services?
    - __ a. Not reasonable to expect it.
    - __ b. Could be but hasn't happened yet.
    - __ c. Yes, it has been on occasion.
    - __ d. Yes, it always is.

12. Okay, maybe it doesn't make any sense to try—but please divide your total project workload into two parts, as follows
    - a. The part serving student/client groups already identified and present ______%
    - b. The part establishing arrangements for serving future groups ______%

Fill in those two blanks above so that the total is 100%. Let us know if you think this breakdown of total effort tells something important about how things are working out in your project.

13. Do you think that your federal sponsors would like you to be spending your efforts as you have represented them in the previous item? Please explain.

14. Here's another difficult one. We want to know how much your project has changed from the very beginning. Think of it just as it is now.
    a. From an hour ago it probably is 100% the same.
    b. From a month it is about ______% the same.
    c. From six months ago it is about ______ & the same.
    d. From the first day of OSERS funding it is about ______% the same.
    e. From the day the proposal was sent in, the idea is about ______% the same.

15. Where were the main changes?

16. What were circumstances that caused those changes?

17. Give us a rough guess as to the percent of the total change that would be reasonably be thought of . . .
    a. as conceptual advancement ______%
    b. as refinement in detail ______%
    c. as responses to trouble ______%
    d. as something else ______% Can you tell us what? ______________ (with the total of the four being about 100%)

18. When you look back at what the project was going to be and what it is now, what makes sense to you about program evaluation planning?
    ___ a. The difference is small. Evaluation plans need not change.
    ___ b. The difference is substantial but evaluation plans should remain the same.
    ___ c. A strong evaluation plan based on original project conceptualization would need considerable change to be appropriate now.
    Comments ____

19. Based on what you have seen or experienced in your project, what are the main obstacles to interagency cooperation?
    ___ a. Agency goals are too different.
    ___ b. Transition objectives remain obscure.
    ___ c. Cooperative procedures and roles not adequately developed.

__ d. Lack of adequate time and resources.

__ e. Cooperation may put support at risk.

__ f. Personality conflicts/territorial disputes.

__ g. Other ____

20. Based on your experience, if you were studying a transition program evaluation report, how important would you consider each of the following components?

	Not Important		Very Important		Not Applicable
a. Statistical data that represent a good description of the program.	0	1	2	3	NA
b. Narrative elements that emphasize the quality of the program plan and activities.	0	1	2	3	NA
c. Information on management strategies relevant to transition.	0	1	2	3	NA
d. Information relating to partner relationships and cooperation.	0	1	2	3	NA
e. Educational Attainment (GRA).	0	1	2	3	NA
f. Number of clients and placements.	0	1	2	3	NA
g. Consumer Satisfaction.	0	1	2	3	NA
h. Employment duration.	0	1	2	3	NA
i. Cost effectiveness.	0	1	2	3	NA
j. Achievements in terms of quality of life and/or employment.	0	1	2	3	NA
k. Recommendations for improvement/executive summary.	0	1	2	3	NA
l. Other ______________________________	0	1	2	3	NA

(a) Interagency communication is time-consuming and difficult. The state VR agency was particularly problematic to some respondents. (b) It is not possible at the proposal writing stage to anticipate all tasks a program might require. This is associated with another concern: (c) Goals and activities may have to be modified as the project develops. Directors desired such changes to be documented and acknowledged as legitimate in the evaluation process.

Proposal Promises and Project Accomplishments: Match or Mismatch?

Respondents were asked about project accomplishments and the match between actual accomplishments and what was promised in the proposal.

Sixty-two of 76 respondents (80%) acknowledged discrepancies between actual accomplishments and stated goals for their transition projects. Some discrepancies were positive--47 (62%) identified additional, unexpected accomplishments. On the other hand, 40 (53%) identified changes that meant stated goals would not be met. When asked to comment on why these discrepancies exist, 27 (36%) respondents mentioned obstacles being encountered in the implementation process. The most common obstacle was interagency cooperation. The second most often mentioned reason for discrepancies was problems in conceptualization of the project (19 or 25%). Other reasons given included overly ambitious goals (7 or 9%), and personnel problems (6 or 8%).

Failure to meet stated goals was attributed to (a) lack of cooperation and support from agencies or persons associated with the project, (b) lack of time or expertise in conceptualizing the project and its evaluation, and (c) grandiose optimism in writing the proposal. Clearly, the implementation phase of most of these projects has been one of continually changing circumstances. The successful project adjusts course, often altering both activities and goals. Evaluation plans need to be flexible and to attend to success in organizational problem solving.

Description of Project Change

In another group of questions we asked project directors to think about the change their projects had undergone after the proposal was sent in. They were asked to estimate the percent of change, to describe the change, to explain the circumstances causing the change, and how the change might affect evaluation processes.

Most respondents felt that their projects have not changed massively during implementation. But an average of 25% change was reported between the day the proposal was sent in and the current state of the project.

Thirty-nine (39%) of the respondents felt that conceptual advancement, refinement of detail, and response to trouble accounted for the change in their projects. Sixteen respondents gave other reasons for change in their projects; 8 involved other agencies or personnel.

The most common project changes, mentioned by at least 25% of the respondents were:

Change of emphasis
Expansion of services
Change in contribution of other persons or agencies.

Also mentioned by several respondents were:

Change in number of participating clients
Refining or altering assessment procedures
Change in time line

Another 22 changes were idiosyncratic. Several respondents offered no comment on project change. Only three respondents said that no changes had occurred.

Four categories of causes for these changes were mentioned by respondents. The most frequently mentioned cause of project change was (a) the cooperation of relevant persons or agencies. This was mentioned by half of the 68 respondents. The other three categories of causes were (b) client needs, (c) personnel issues, and (d) the day-to-day realities of implementation not anticipated in the proposal. In addition, 11 respondents made no comment, and another 14 gave responses that were idiosyncratic. The picture that emerged was one of projects operating in contexts over which they had only partial control and needed to adapt to problems, constraints, and occasionally emerging opportunities.

It is interesting to note the similarity of responses to all the questions that have been discussed. First, change is clearly a common part of project implementation. In the first question we asked respondents whether they found themselves involved in tasks they had not planned to be involve in; 78% said "yes." In the second question we asked respondents if there was a discrepancy between project promises and actual accomplishments; 80% said "yes." In question #14 we asked respondents to estimate the percentage of change their project had undergone since the day the proposal was sent in; only 8 of 70 respondents said it was 100% the same.

The Problems of Interagency Cooperation

Another similarity in responses across the questionnaire was that the most frequent comment regarding project change focused on the cooperation of other agencies or relevant persons. For example, in commenting on the need to trouble-shoot in question #1, respondents most frequently mentioned interagency communication as problematic. In commenting on the discrepancy between proposal promises and actual accomplishments in question #2, respondents most frequently mentioned obstacles centering on interagency cooperation. In response to question #16, respondents indicated that the most common cause of project change was the cooperation of other persons or agencies. And, finally, in response to question #15, which asked them to describe project changes, respondents indicated that the contribution of other persons and agencies was the most common project change.

Clearly, obtaining interagency cooperation was an important and difficult task for most respondents. In question #19 we asked respondents to name the main obstacles to interagency cooperation.

The most frequently named obstacle, mentioned by 48 of 80 respondents (60%) is "cooperative procedures and roles not adequately developed." Each of the remaining obstacles were mentioned by less than half of the respondents. The next most frequently mentioned obstacles, reported by at least one-third of the respondents, were (a) lack of adequate time and resources, (b) personality conflict/territorial disputes, and (c) agency goals are too different. One in five respondents reported that another obstacle to interagency cooperation was that "transition objectives remain obscure." Few respondents, 6 of 80 (8%), reported that "cooperation may put support at risk." Only 4 respondents said that they had encountered no obstacles to interagency cooperation.

More attention was drawn to shortcomings in other agencies than in their own projects, but many different kinds and origins of shortcomings were named. The complexity and problems of interagency cooperation are reaffirmed.

Effect of Project Change on Evaluation Plans

All these project changes have an impact on project evaluation. In response to the trouble-shooting narrative given in question #1, several respondents expressed concern about having unexpected, time-consuming activities documented in the evaluation and that actual project accomplishments may not be covered in the original project goals and evaluation plan. Similarly, in response to question #2, several respondents commented on inadequate evaluation plans for assessing qualitative attitude changes and the need for flexibility in project evaluations.

In question #18 we directly asked respondents about the effects of project changes on evaluation plans. In response, 68 of 75 (91%) respondents indicated that their evaluation plans should not change. This surprising conclusion apparently is based on the idea that project evaluation should focus primarily on student outcomes. A large portion of the program evaluation literature takes a different tack, that quality of management, quality of interagency relations, and quality of life within the project are part of the evaluation responsibility. Had the directors had this view of evaluation they surely would have responded differently to question #18. The responsibility for both funding agency and technical assistance clarification is apparent.

Responses to all the questions discussed above underscore the need for adjustment during the implementation process and some flexibility in evaluation of transition projects. The fact that directors find themselves dealing with unplanned objectives or unstated goals does not devaluate the success of a project; rather, filling underlying tasks in preliminary stages determines the future success of a project and the quality of its accomplishments.

Consensus of Goals of Transition Services

Related to the discussion of project changes in the preceding section is the question of whether project participants had difficulty in reaching agreement regarding the definition of transition services, and whether possible disagreement proved a liability to the project.

In questions #8 through #11 we asked respondents to discuss the amount of agreement regarding definition of transition services and goals for those services among participants in their project.

Most respondents (53 of 78) said there was not a problem in defining transition services when the project was getting started. Twenty-one respondents indicated that it was sometimes a problem, and another four said it was a huge problem. Of the respondents who viewed agreement on transition definition as a problem, the most common comments dealt with interagency agreement.

Regardless of whether lack of agreement was a problem in getting the project going, roughly three-quarters of the respondents indicated that such differences can be viewed as an asset to the project. Most of these respondents commented that such disagreement can lead to growth and is helpful to the project in the following ways:

- Refines viewpoints
- Fosters innovation, creativity, problem-solving
- Expands the vision and scope of the program

The minority of respondents who felt that such disagreement is a liability mentioned costs of disagreement such as lost opportunities or wasted energy on defending the project instead of developing it.

When asked about differences in viewpoints of transition goals between the project leadership and various other participants, most respondents indicated there were only minor differences or none at all.

Most respondents (73%) viewed evaluation as helpful in achieving agreement within the project.

Predilection to Serve Own Site Versus Generalization of Services

In case study research previously completed within model projects we found strong propensities to build up the quality of local services. We found this predilection sometimes working against the obligation (accepted at least in soliciting funding) to prepare a site maximally useful for other sites to learn from. Not surprisingly, project directors felt that the *strongest* site would be the best model, the most useful for others to consider adopting elsewhere. But the choice frequently was made to accommodate the project as best as possible to local contingencies even though that might particularize it more than would be useful for illustrating services for staffs at other sites.

In an effort to understand better the thinking of administrators of transition projects along these lines, we inquired into their perspectives of the generalizability of information about services. Knowing that under direct questioning they would speak strongly for the generalizability of information, we approached the matter indirectly.

In questions #4 through #7 we asked respondents for perceptions of the generalizability of the success of their own project and that of a hypothetical project. Specifically in question #4 we asked respondents how interested they would be in receiving information about a "successful" project. Their opinion regarding the generalizability of this hypothetical project was solicited in question #5.

Respondents expressed interest in getting information about a hypothetical, dissimilar successful project.

Most respondents (almost 66%) felt that the success of a hypothetical project is probably generalizable to other settings.

In question #20 we asked respondents how important several different components of an evaluation report (e.g., narrative elements, GPA, employment duration) would be to them. Respondents indicated that all the components of a hypothetical program evaluation report that we suggested are fairly important.

Thus, respondents did declare themselves ready to learn from other projects; they were not afraid that they might be misguided by the idiosyncracy of the disseminated situation. They acknowledged that success is multicausal, interpreting interagency cooperation and good staff as the most valuable ingredients. Yet, they did not indicate examples of how they study situations elsewhere to help solve their own problems. Observations in the field have persuaded us that such study is rather rare.

Project characteristics most commonly seen as vital to success were (a) interagency cooperation and good working relations, and (b) top quality staffing. The "personal element" of each project was seen to determine its success. The relationships and persons involved are unique to each project, yet critical to every project. The particular arrangement was not seen as generalizable, just the need to work at that characteristic.

Project Orientation toward Serving Either Future Groups or Present Groups

In questions #12 and #13 we asked respondents to consider a division of project workload into one part serving client groups already present and one part arranging to serve future groups. They were then asked to identify the proportions, comment, and discuss whether they think their federal sponsors would be satisfied with such a division.

Most respondents reported spending at least half their project workload serving groups already present, rather than serving future groups. The mode was 80% "present," 20% "future." Only 12 said they were more oriented to future services.

When asked to comment on this division of project workload, 29 of 77 respondents offered no comment. The others saw no real alternative. When asked if federal sponsors wanted them to divide their project workload the way they have, 68 of 75 respondents said "yes."

The issue behind these questions was whether the projects are simply service projects to present clients or enduring installations likely to serve future clients as well. These are not mutually exclusive aims, but there are actions and expenditures that would serve one aim better than the other. The project administrators did not acknowledge this competition of aims. Perhaps the question was too indirect or casual to suggest this issue.

Still, the strong orientation to present clients and local sites may be perplexing to people who see their federal funding as not primarily for local needs but for more general program development.

The saliency of these observations depends on the frequency with which local and general needs are in conflict. The usual tradeoff would arise in instances when resources (usually time) could be spent on daily operations versus establishing common characteristics that avoid idiosyncratic local (limiting) arrangements, and provide information potentially useful to users elsewhere.

The project director does not find these choices easy to make. The local needs are immediate. Assistance to distant constituencies calls for a different kind of expertise, something not many project directors have developed. It may be unreasonable for funding agencies to allow skilled practitioners to assume they are skilled change agents on a regional or national basis. The matter needs more thought and study.

Part Two

Introduction to Task and Activities

TASK 1: Literature Review

(Lynda Leach)

Summary of Year 3 Activities

The operation and activities of the Transition Institute Library and staff have remained similar to the established patterns and procedures of the previous two years. Few changes have been initiated due to the routine nature of our information gathering activities. Bibliographic control of the Library's holdings continues to be maintained with the use of Notebook II, a data management software package, and automation of all aspects of the Library has been accomplished (publication of the annual bibliography, the generation of a card catalog, quarterly updates of projects' status as well as project files, new Library holdings, book and journal orders).

The focus of Task 1 to review the literature/resources on the efficacy of transition and evaluation is systematically done on a daily basis. In Year 3 the same approaches were employed to survey appropriate journals, indexes, data bases, agency publications, and project products. DIALOG searching of remote data bases such as ERIC and ECER continues on a request basis. This year's project product listing significantly reflects activities of projects in the form of final reports and videocassettes. Previewing, abstracting, and cataloging videocassettes on supported employment efforts have become a new activity.

Overview of Year 4 Activities

In this third year of operation the library staff continues to be responsive to graduate students' and staffs' information needs in their research, evaluation, and evaluation technical assistance activities pertaining to transition. The attached annual bibliography and management plan reflects this commitment.

Management Plan for Year 4

TASK 1: Literature Review

Task Manager: Lynda Leach

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
1.1	Systematically review literatures on evaluation methodology, efficacy of secondary and transitional services, and relevant research pertaining to transition	Written abstracts and annotations	8-21-88	ongoing	LL, AH
1.2	Online database searching (DIALOG) of ERIC, ECER, etc.	Computer bibliographies	8-21-88	on demand	LL
1.3	Systematically review and input information/material received from all OSERS projects to OSERS Product Listing and bibliography file. Preview project videos & abstracts	OSERS Product Listing/ Transition file	8-21-88	ongoing	LL, AH
1.4	Quarterly reporting of project status re: final reports and continuations	Quarterly report	4-88	ongoing	LL
1.5	Print out and distribute acquisitions listings from searches and projects to all Institute faculty	Acquisitions List	8-21-88	ongoing	LL, AH
1.6	Complete initial draft of annotated bibliography series (Vol. 4)	Draft	8-21-89	4-15-89	LL, AH
1.7	Circulate initial draft form of annotated bibliography (Vol. 4) to Institute Advisory Committee for review, critique, and evaluation	Evaluative reviews	4-25-89	5-16-89	LL, IAC, ML
1.8	Revise, print, and disseminate the annotated series to professionals in the field, professional organizations, ERIC Clearinghouse, Univ. of IL Special Collections	Complete Vol. 4 Annotated Bibliography	6-1-89	7-30-89	LL, CD
1.9	Review OSERS project material/ information received for inclusion in Interchange	Interchange article	8-21-88	quarterly	LL, AH, ML

LL - Lynda Leach
AH - Adrienne Harmon
IAC - Institute Advisory Committee
CD - Cindy Dobbs
ML - Merle Levy

TASK 2: Annual Meeting

(Dr. Janis Chadsey-Rusch)

Summary of Year 3 Activities

The Project Director's Third Annual Meeting was held December 10-11, 1987 at the Loews L'Enfant Plaza Hotel in Washington, D.C. As in the past two years, the purpose of the meeting was (a) to provide an update of the activities of the Transition Institute and (b) to provide an opportunity for project directors to disseminate information to one another.

The meeting was designed on the basis of input from the project directors who had attended the Second Annual Meeting. For example, the meeting was lengthened to two full days, roundtable discussion sessions were included, and more project speakers were provided opportunities to present.

After the meeting, two additional activities took place: an evaluation report was written about the meeting, and a meeting proceedings document was compiled.

The Institute continued to subcontract with the Office of Conferences and Institutes (OCI) on the University of Illinois campus to assist with coordinating the meeting. OCI was responsible for making all of the hotel, conference room, food, and audiovisual arrangements. In addition, OCI staff conducted advance registration of the meeting; answered pre-meeting requests and inquiries; provided name badges, ribbons, pens, and rosters; conducted on-site registration; and remained on site for the duration of the meeting. After the meeting, OCI handled all the financial matters with the hotel and provided a roster of all meeting participants.

The Project Directors' Fourth Annual Meeting again will be held in Washington D.C. at Loews L'Enfant Plaze Hotel. The date for the meeting will be December 1-2, 1988. Based upon feedback from the participants at the Third Annual Meeting, the format for the 1988 Meeting will differ from what it has been in previous years. The meeting will be shortened to a day and a half because so many project directors left on the afternoon of the second day during the 1987 meeting. There will only be one major presentation by the Institute's Director; feedback from participants during the 1987 meeting indicated that they were aware of Institute activities from the written material that was disseminated to them. Roundtable discussion sessions will be scheduled again, and there will also be two keynote speakers rather than one. There will continue to be a session with OSERS personnel, featured project speakers, and an exchange dissemination/poster session.

Overview of Year 4 Activities

The format for Year 4 activities will be similar to the format for Year 3 activities (see Management Plan). Beginning in August and continuing until the Project Directors' Fourth Annual Meeting in December, we will work closely with OCI to make certain that all plans are finalized and that all pre-meeting requests are handled in an appropriate manner. An evaluation form will be designed for the meeting. In addition, a program booklet and packet of materials will be developed, printed, and packaged.

During December 1-2, members of the Institute faculty will conduct the meeting. After the meeting, the evaluation responses will be analyzed and a report prepared. Based on the evaluative feedback from the project directors, the format and content for the Fifth Annual Meeting will be planned, beginning in April 1989.

In the past, a meeting proceedings document has been prepared and disseminated to all project directors. This document has been similar in content to the program booklet distributed at the meeting. Rather than duplicate this effort, a proceedings document will not be prepared. Papers presented by the keynote speakers (and any other relevant papers presented at the meeting) will be disseminated to project directors in *Interchange*.

Management Plan for Year 4

TASK 2: Annual Meeting

Task Manager: Dr. Janis Chadsey-Rusch

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
2.1	Initiate weekly contacts with the Office of Conferences and Institutes (OCI) regarding conference planning, arrangements, and management	Written notes	8-21-88	12-9-88	OCI, JCR
2.2	Finalize food and audiovisual arrangements	Food and audio-visual equipment arranged at meeting	8-21-88	11-10-88	OCI
2.3	Follow-up pre-meeting requests	Requests fulfilled	8-21-88	12-9-88	OCI, JCR
2.4	Finalize agenda	Agenda	8-21-88	10-1-88	JCR
2.5	Conduct meeting registration	Registration form	8-21-97	12-1-88	OCI
2.6	Design evaluation form	Evaluation form	8-22-88	10-20-88	JCR
2.7	Develop materials for meeting packets	Packet materials	8-21-88	11-10-88	JCR, CD
2.8	Print materials for packets	Printed materials	11-10-88	11-20-88	CD, OCI
2.9	Assemble packets	Assembled packets	11-20-88	11-25-88	CD
2.10	Pack for meeting	Packed boxes	11-25-88	11-29-88	CD
2.11	Conduct meeting	Meeting	12-1-88	12-2-88	OCI, IPI
2.12	Compile and write up evaluation results	Evaluation report	12-15-88	1-15-89	JCR
2.13	Plan for Fifth Annual Meeting - schedule dates - draw up tentative agenda - select hotel - send information to project directors	Written plan in monthly report	4-15-89	8-20-89	JCR, OCI

JCR - Dr. Janis Chadsey-Rusch
CD - Cindy Dobbs
IPI - Institute Principal Investigators
OCI - Office of Conferences and Institutes

TASK 3: Communication

(Merle Levy and Cindy Dobbs)

Summary of Year 3 Activities

The activities of the communication task have continued to be focused upon providing information to model projects about the activities of other model projects and about current research activities of the Institute. A Publications Office was established and a Publications Editor was appointed (.5 FTE) during Year 2. The purpose of this Office is to coordinate acquisition, editing, scheduling, production, and distribution of the numerous articles, reports, conference proceedings, and other documents that emanate from the Transition Institute.

The Institute maintains a monthly summary of all contacts, including both telephone and written requests. The 24-hour telephone response service continues to be offered, as is the SpecialNet Bulletin Board established at the inception of the Institute.

A series of special-interest monographs published by the Institute during 1987-1988 are described in the reports of the respective tasks with whose activities these monographs are associated.

Year 3 Products

The Institute publishes Interchange, an eight-page quarterly newsletter that provides information about project and research activities, current legislative developments, and other items of interest. Interchange is mailed to approximately 2,500 transition professionals.

The PUBLICATIONS LIST describes all current publications of the Institute and its faculty. The list is revised semi-annually. Each edition is distributed to projects and is available to others upon request.

Overview of Year 4 Activities

Each of the activities described in the Summary of Year 3 Activities will be continued in Year 4. The communication task will continue to provide publication assistance to facilitate the dissemination of information related to all aspects of the ongoing activities of the Institute.

Management Plan for Year 4

TASK 3: Communication

Task Managers: Merle Levy and Cindy Dobbs

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
3.1	Communicate model project activities and research findings through Interchange	Interchange	8-21-88	quarterly	FR, ML
3.2	Develop and maintain up-to-date publication list	Publication list	8-21-88	Semi-Annually	ML, CS
3.3	Disseminate manuscripts based upon research conducted by Institute	Manuscripts	8-21-88	ongoing	FR, ML
3.4	Maintain the Institute contact record	Monthly summary of contacts	8-21-88	monthly	CD, IPI
3.5	Maintain 24-hour telephone response service		8-21-88	ongoing	CD, CS
3.6	Maintain SpecialNet Bulletin Board for interproject communication		8-21-88	ongoing	CD, CS

ML - Merle Levy
CD - Cindy Dobbs
FR - Dr. Frank Rusch
CS - Clerical staff
IPI - Institute Principal Investigators

TASK 4.1: Social Ecology of the Workplace

(Dr. Janis Chadsey-Rusch)

Overview of Year 4 Activities

A number of Year 4 activities will relate to the activities conducted during Year 3. First of all, during Year 3, it was stated that one research paper would be written. The data collected on the three groups of students (i.e., with mild, moderate, and severe handicaps) suggest such different conclusions that it does not make sense conceptually to combine the results into one report. Consequently, one additional manuscript describing the results from data collected during Year 3 will be written and submitted for publication during Year 4.

One arena that was to have been emphasized during Year 4 was the issue of training social skills. Before conducting an investigation of this type, a paper was to have been written that reviewed the literature in the area of social skills training. This review process will begin this summer, but it is not likely that this paper will be completed until after Year 4 activities have begun.

During Year 4, a study will be designed to investigate the effectiveness of one social skill training strategy. The strategy will likely incorporate the social skills model conceptualized by McFall (1982) and suggested by Chadsey-Rusch (1985) for use in employment contexts. This study will be conducted as a part of a masters' thesis by Lana Collet-Klingenberg (who has worked on the project for two years) under Dr. Chadsey-Rusch's supervision.

In addition to the written products and the training study, efforts also will begin to assess the loneliness of workers who are handicapped in employment contexts. From the research efforts of the Institute, we are beginning to obtain data which suggest that workers with handicaps are not befriended very frequently by nonhandicapped workers (Rusch, 1988) and that if interactions do occur, they are rarely about nonwork topics (Chadsey-Rusch, Gonzalez, & Tines, 1987). Because friendship formations and social support may contribute to job maintenance, it would seem to be important to assess this dimension. One way to approach this problem is to assess loneliness.

During Year 4, a study will be initiated that will assess the loneliness of workers with handicaps who are working in integrated employment contexts. The instrument that will be used to assess loneliness will be similar to the instrument developed by Asher, Hymel, and Renshaw (1983) and used in a recent study to assess the loneliness of students with mild handicaps (Luftig, 1988). Because the instrument has only been used and validated with children in school settings, a pilot study will be conducted that will validate the psychometric properties of the instrument for use with adults in employment contexts.

If the instrument is found to be reliable and valid, a large N study will be initiated at the beginning of Year 5. The purpose of this study will be to determine the relationship between loneliness and other variables such as gender, type of job, social skills, vocational (production) skills, sociometric ratings, and length of time on job.

Management Plan for Year 4

TASK 4.1: Social Ecology of the Workplace

Task Manager: Dr. Janis Chadsey-Rusch

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
4.1.1	Write paper regarding data collected on students with moderate handicaps	Journal article	12-20-88	4-15-89	JCR
4.1.2	Write review chapter on social skills training	Chapter	8-21-88	1-15-89	JCR
4.1.3	Conduct training study				
	- Write thesis proposal	Proposal	8-21-88	10-15-88	LC
	- Obtain permission from subjects to be in study	Permission slips	10-15-88	11-15-88	LC, JCR
	- Design data collection system	Data collection system	10-15-88	11-15-88	LC, JCR
	- Train observers	Observers	11-15-88	1-15-89	LC, JCR
	- Collect data	Graphs	1-15-89	5-15-89	LC, JCR
4.1.4	Analyze data	Analyze data	5-15-89	5-30-89	LC, JCR
4.1.5	Write up study	Journal article	5-30-89	8-21-89	LC, JCR
4.1.6	Conduct pilot study on loneliness				
	- Meet with Steve Asher		9-1-88	9-1-88	JCR
	- Develop instrument		9-2-88	11-27-88	JCR
	- Solicit subjects		11-27-88	3-20-89	JCR
	- Conduct pilot		3-20-89	6-20-89	JCR
	- Analyze data		6-20-89	8-21-89	JCR

JCR - Janis Chadsey-Rusch
LC - Lana Collet-Klingenberg

TASK 4.2: Co-Worker Involvement Research Program

(Dr. Frank R. Rusch)

Overview of Year 4 Activities

Five studies will be initiated during Year 4. The first study will focus upon assessment of the extent to which the Co-worker Involvement Instrument measures co-worker involvement in the workplace; the second study will describe co-worker involvement (a descriptive analysis); the third study will analyze whether there are significant differences among alternate placement approaches; and the fourth study will assess the extent to which co-worker involvement changes over time. The fifth and final study will focus upon the design of intervention approaches that might be introduced to change the type and the extent to which co-workers are involved with target employees. Each of these studies are overviewed below.

Instrument development. Research undertaken during Year 3 will continue through December 1988, and will assess the psychometric properties of the Co-worker Involvement Instrument. Specifically, interrater reliability and test-retest reliability phases will be concluded by August 15, 1988. The Co-worker involvement management plan dated 12/15/87 outlined a sequence of activities that included completing the interrater and test-retest reliability phases and correlational study, resulting in a paper and revised Manual describing the Co-worker Involvement Instrument, on 8/20/88. This work was delayed in favor of completing a validation of the content of the Instrument at the national level. Additionally, model program directors were asked to volunteer to score the revised instrument. Content validation and volunteering activities concluded 5/15/88.

A technical report describing the procedures that were used to develop the Instrument will be available 9/15/88. From September through December 1988 we will conclude the final phase of work required to assess the validity of the Instrument.

Descriptive analysis of co-worker involvement. Two papers will be written that describe co-worker involvement. The first paper will describe co-worker involvement among the supported employment model programs under development in the state of Illinois; the second paper will describe co-worker involvement among the secondary/transition model programs funded by OSERS. Primary questions addressed will include what types of involvement are taking place across sex, disability, and placement approaches (individual placements v. group placements v. other).

Discriminant analysis of co-worker involvement. One study will report the extent to which the Illinois sample differs from the national sample with respect to demographic variables and what demographic variables best discriminate among any of the groups under study in relation to placement approach.

Repeated measures analysis of variance. One study will report on changes in co-worker involvement over time. The Illinois Supported Employment Project is collecting co-worker involvement data from 50 projects each month. The primary dependent measure is type of involvement. Efforts will be made to measure the extent to which co-workers are involved. However, we do not anticipate collecting enough repeated measures to analyze appropriately the intensity of involvement.

Co-worker interventions. Beginning in the fall of 1988 we will begin to explore possible interventions that teachers or employment training specialists may implement to change the type or extent to which co-workers are involved with target employees. We have met with the local rehabilitation facility on several occasions and will become involved in their ongoing efforts to provide post-placement follow-up support to target employees.

Management Plan for Year 4

TASK 4.2: Co-Worker Involvement Research Program

Task Manager: Dr. Frank R. Rusch

Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
4.2.1 Instrument Development (Study 1)				
1.1 Conduct interrater and test-retest reliabilities	Reliability coefficients	6-1-88	7-1-88	FR, JM
1.2 Draft paper on correlational results	Paper	6-1-88	8-15-88	FR, JM
1.3 Review report	Review	8-15-88	9-15-88	IAC
1.4 Draft final report	Final report	8-15-88	10-1-88	FR, JM
1.5 Revise Coworker Involvement Manual	Revised manual	6-1-88	9-15-88	FR, JM, CH
4.2.2 Descriptive Analysis				
2.1 Plan Study 2 (Illinois Sample)	Overview of methods	6-3-88	6-15-88	FR, CH
2.2 Analyze data	Data analysis	6-3-88	7-1-88	FR
2.3 Draft Study 2	Paper	6-15-88	7-15-88	FR, CH
2.4 Review study	Review	7-15-88	8-15-88	TI staff
2.5 Draft final report	Final report	8-15-88	9-15-88	FR, CH
2.6 Plan Study 3	Overview of methods	9-1-88	9-15-88	FR, JM, LD
2.7 Analyze data	Data analysis	9-1-88	11-1-88	FR
2.8 Draft Study 3	paper	9-15-88	11-15-88	FR, JM
2.9 Review study	Review	11-15-88	12-15-88	IAC
2.10 Draft final report	Final report	12-15-88	12-30-88	FR, JM
4.2.3 Discriminant Analysis Study				
3.1 Plan Study 4	Overview of methods	12-15-88	2-15-89	FR, CH
3.2 Analyze data	Data analysis	12-15-88	3-15-89	FR
3.3 Draft Study 4	Paper	2-15-89	4-1-89	FR, CH
3.4 Review study	Review	4-1-89	5-1-89	TI staff
3.5 Draft final report	Final report	5-1-89	6-1-89	FR, CH
4.2.4 Repeated Measures Study				
4.1 Plan Study 5	Overview of methods	6-1-88	9-15-88	FR, JJ
4.2 Analyze data	Data analysis	7-15-88	11-15-88	JJ
4.3 Draft Study 5	Paper	9-15-88	1-15-89	JJ
4.4 Review study	Review	1-15-89	2-15-89	DC
4.5 Draft final report	Final report	2-15-89	3-15-89	JJ
4.2.5 Co-worker Interventions				
5.1 Plan 1988 activities	Management plan	6-2-88	7-15-88	FR, CH

FR - Dr. Frank Rusch
CH - Carolyn Hughes
JM - Jeffrey McNair

TI Staff - Transition Institute staff
DC - Dissertation Committee

TASK 4.3: Instructional Strategies Research Program (Completed)

(Dr. James Halle)

Summary of Year 3 Activities

The Instructional Strategies Research Program focused upon strategies that teachers, instructors, job coaches, and employers might use to lessen their direct involvement and enhance worker independence in everyday functioning. In Year 3, OSERS project directors were surveyed to determined the extent to which trainer/prompt dependence was a problem among the populations they serve. We were also interested in the procedures currently in use to remedy trainer/prompt dependency. A paper summarizing the results of this study is forthcoming.

Year 4 Activities

This research program has been completed.

TASK 4.4 Parents of Young Persons with Handicaps in the Transition Process

(Dr. Francesca Lundstrom)

This project was initiated in mid-December 1987 at the request of Advisory Board members attending the 1987 Annual Conference of the Transition Institute in Washington in early December.

The research focuses on parents of young persons with such handicaps as learning disabilities and mental retardation. It is designed to discover (a) if transition, as defined above, is a white, middle class concept, (b) which education, rehabilitation, and transition services families perceive are required to meet their specific needs, (c) which services families perceive are needed but are not readily available now and in the future, and (d) which elements facilitate and which inhibit the involvement of families in the transition process.

Transition has been defined as the movement between different stages of career development (Super, 1957). Brolin and Kokaska (1985) pointed out that the shift from attending school to establishing a career is likely to be the most traumatic and lengthy transitional period of a person's life. For youths with handicaps, transition is the process of moving from school to successful employment and satisfactory community adjustment (Halperin, 1985; Will, 1984). Recent research has demonstrated that the roles and attitudes of parents are vital factors in the successful transition of a young person from school to work (Hill, Seyfarth, Orelove, Wehman, & Banks, 1985; McDonnell, Wilcox, Boles, & Bellamy, 1983; Nitzberg, 1974; Smith, 1983).

Surprisingly, in the United States, it was not until the civil rights legislation of the 1960's that the rights of special population youth and their parents were recognized (Phelps, 1986). PL 94-142, the Education for All Handicapped Children Act of 1975, specified the legal rights of parents. Snauwaert (1987) claims this statute protected the rights of handicapped children and their parents or guardians (e.g., the right of due process and procedural safeguards in the assessment, placement, and evaluation process). That the vital role of parents has only recently been recognized in law is reflected in the delivery of services to families with members who are handicapped. Before the 1980's, parents were rarely consulted when individualized education programs (IEP) were being drawn up. Smith (1983) states that even at the time he was writing, "The parent role in decision-making for their child is often limited to a passive one."

A similar situation exists in Britain. Mittler, Cheseldine, and McConachie (1981) claim there have been three main phases in the delivery of services to parents of persons who are handicapped. Before the 1960's, parents received little or no help from professionals and were left largely unsupported. Toward the end of the 1960's, services took the form of training parents to use some of the techniques previously restricted to professionals, thus making parents "co-therapists." Mittler et al. claim Britain is now entering a third phase, in which attempts are being made to develop a partnership on the basis of equality. The emphasis lies on the individual family, and parents are encouraged to retain their sense of identify and to maintain their own natural styles of parenting.

In the United States, the delivery of services to persons with handicaps and their families also seems to be moving from the paternalistic model toward a more individual--and family--oriented type of practice.

The tradition of excluding parents from decisions about the education and transition process of their children has also been reflected in relevant research. Note, for example, the construction of research instruments to measure parents' attitudes toward transition with relatively little thought for what might be the cultural ethos of particular subgroups of parents. As defined on page 1, transition may be a white, middle-class concept not applicable to some social classes and many ethnic minorities. "Normal" transition for some minorities in our society may not conform to the standard definition, especially in instances where families are in social support programs. The research proposed here is in the spirit of the third phase of Mittler et al. We wish to encourage families to remain self-determined while ascertaining which services parents perceive (a) are required for successful transition now and in the future, and (b) are needed but are not readily available.

Rationale

Every year approximately 650,000 handicapped young people in the United States either graduate from high school or become too old to qualify for public education. Only 21% will become fully employed; 40% will be underemployed and at the poverty level, and 26% will be on welfare (President's Committee on Employment of the Handicapped, 1976, cited in Corthell & Van Buskirk, 1984). Copa (1984) noted that unemployment can lead to a variety of social pathologies such as crime and drug abuse. In many instances it is those who are least well off financially and least well endowed intellectually who fall prey to the most serious social problems. In addition, Rusch and Phelps (1987) point out that (a) 67% of all Americans with handicaps between the ages of 16 and 64 are not working, (b) those individuals with a handicap who are employed are more likely to have part-time employment, and (c) 67% of those persons with handicaps who are not working say they want to work. Citing Phelps, Blanchard, Larkin, and Cobb (1982) and Walls, Zawloki, and Dowler (1986), Rusch and Phelps note, "Depending on the severity of the disability, the annual costs borne by taxpayers for sheltered workshop programs, adult day care services, and income transfer programs that support unemployed persons can run as high as $12,000 per person annually" (p. 488).

The economic benefits derived from placing and supporting individuals in competitive employment include a larger tax base, greater productive capacity for the nation, and significant reductions in social costs (Copa 1984; Rusch, 1986; Wehman, Hill, Goodall, Cleveland, Brook, & Pentecost, 1982). Rusch and Phelps conclude that the "unemployment and underemployment of...youth have raised the issue to the level of national priority" (p. 487).

It is therefore vitally important from a national standpoint that young persons with handicaps should be absorbed into the working population of the country to avoid the enormous loss of national resources and the social problems that ensue from unemployment and underemployment. Every step that can be taken toward successful transition for persons with handicaps is a step toward employment for all.

The Role of Parents in Transition

Why should the providers of transition services involve parents in determining the aptitudes and future life goals of a young person who is handicapped? McDonnell, Wilcox, Boles, and Bellamy (1983) point out that transition presents a complex set of issues to those responsible for service planning. The authors mention that at present there is no common mechanism to project the needs of high school graduates with handicaps. Parents, the authors claim, "are in a unique position to provide planners with such information" (p. 10) because (a) they have been constant participants in the lives of their children and "have a perspective on life planning that is not matched by episodic professional contact" (p. 11), (b) they can be an important political force in securing necessary services for their offspring, and (c) they are indirectly consumers of transition services. It is parents who must confront the painful results when transition efforts are unsuccessful (e.g., disruption of home life and discouragement). Finally, McDonnell et al. state that although "parents are not the only source of planning information, they are a source that should not be ignored" (p. 11).

A Cross-National Perspective of Parents' Problems

In any country research in the area of problems faced by such parents is scant. Worthington (1982) describes the situation confronting British parents of mentally handicapped persons:

> Almost as soon as their baby or young child is diagnosed parents are asking themselves, "what kind of adult are we going to be responsible for?" They realize that their responsibility will last for the whole of their lives whether the child remains at home or goes into residential care. What is certain is that he will be unlikely to make his own way in the worked, leaving home for a career and marriage as a natural process, voluntarily and with their blessing. It is impossible not to wonder what it will be like. (p. 122).

Much of the recent research from Britain reflects the anxiety of parents with children who are mentally handicapped. Hannam's (1975) study of seven families, each having a child under the age of 10 with a mental handicap, found that parents did not know what would happen to their child when they were dead, and they were reluctant to place the heavy burden of caregiving on brothers and sisters. In fact, Mertheimer's (1981) study of 13 elderly parents of mentally handicapped persons found that some of the parents hoped that the handicapped family member would die before they did. Several parents had even contemplated taking the life of the handicapped person when they finally found themselves close to death. This author also found that the 13 families she interviewed tended "just to live for the present" (p. 26) and only three had started to make plans for the person with a mental handicap to leave home. In some instances, Merthimer (1981) claimed, the perceived unacceptability of available services for the future care of their handicapped family member makes parents "turn their backs on the future" (p. 27). In a four-year research project involving teenagers with handicaps and their parents, Jeffree and Cheseldine (1983) suggested that parents of today's adolescents have received little help in the past in spite of needing special advice and assistance at the critical time of school-leaving. Mittler (1979) stated in this regard:

> Most families will have adjusted to some extent to the problems presented by their child and will have developed a day-to-day routine over the years. But as the time for school leaving/graduation/approaches, they are bound to become increasingly apprehensive about the future, and to revive all the basic problems and anxieties of any family with a handicapped child. (p. 110)

Fairbrother (1983) asserted that parents of persons with mental handicaps need a degree of independence and that having an adult with mental handicaps in the family can "shrivel" social life. This author also perceived that the rights of people with mental handicaps are often denied by parents--not for selfish reasons but rather because many parents tend to be overprotective.

In the United States the picture is very similar to that in Britain: parents seem to be worried about the future of their children with handicaps (e.g., Haney, 1985; Kielman, 1985). McDonnell et al. (1983, p. 9) illustrated the situation facing today's parents with the words of a mother (at the National Parent Conference for Children Requiring Extensive Special Education Programming, year not given) who described her own fear that a relatively good special education program was soon to be followed by "long, lonely years at home." The authors also point out that "for most of their adult lives, severely handicapped graduates can look forward only to infantalizing readiness activities, rather than work, wages, and community participation" (p. 10). Some parents even face the dilemma that if their young person with a handicap gests a job on the open market, the rate of pay may preclude the parents' claiming social welfare. Hahn (1983, p. 40) claims, "There are significant "disincentives" which prevent disabled persons from leaving the welfare rolls. Securing employment frequently results in high costs for transportation, medical care, and personal assistance." In relation to parents' tendency to be overprotective, Smith (1983) mirrors the British sentiment that parents may need help to allow their young person with handicaps a modicum of freedom. The author, quoting a Vocational Adjustment Coordinator, claims that "girls who are mentally handicapped suffer from an extra handicap in the form of extreme overprotectiveness of the part of their parents" (p. 55). This, and other indications of the overprotectiveness of parents of women who are mentally handicapped, was also shown by Lundstrom-Roche (1982).

In summary, the literature from the United States and Britain on parents of young people with handicaps demonstrates that parents find transition an extremely traumatic time when the coping mechanisms built up over many years crumble. Some groups of parents may need different kinds of support services than others to help them formulate an overall plan for the future care and well-being of their offspring. Help may be needed before, during, and after transition and even much later in parents' life cycles when for reasons of ill health, limited resources, old age, or death, parents are unable to be the primary caregivers.

Research Outline

The research proposed below describes the development of an instrument for (a) identifying the different types of families who need services for a young family member with handicaps such as mental retardation or learning disabilities, (b) monitoring the expressed needs of these parents for present and future education, rehabilitation, and transition services, and (c) discovering which elements inhibit and which facilitate the involvement of families in the transition process. Parents will be asked to describe, in their own terms, their present and future aspirations for the family member with handicaps. Concerning (a), Mittler et al. (1981) have pointed out that "it is all too easy to generalize about 'the needs of families' and to over look the enormous range of individual differences. These will differ as much as, if not more than the needs of any other families" (p. 2). Defining homogeneous groups of families according to similar needs and then within each such group ascertaining needs and priorities can lead to savings in various areas and to more efficient use of precious resources, as is necessary in today's economic climate. The results from (b) above should lead to an awareness of the problems faced by different groups of parents and the possibility of streamlining and personalizing services to meet more closely the needs of different groups of parents, highlighting those parts of the services that specific groups of clients find invaluable, and pruning other services that are identified as redundant. The results from (c) would be of enormous benefit to those interested in helping parents become more involved in every aspect of the transition process.

We anticipate a wide range of diversity among families, owing to such different factors as ethnicity, rural or urban domicile, socioeconomic status, level of handicap, and quality or type of services available. Some parents may be fully active and involved in transition planning and may have made full and detailed plans for the future of their young person(s) with handicaps; others may expect their service organization to be aware of their specific needs and to continue to provide or arrange for others to provide which services are required, ranging from getting jobs for their young person, emergency residential services, and long-term accommodation. But other parents may not have any concrete plans at all and may be ignoring the problem of transition. Still other parents, of course, may fall somewhere among these three scenarios.

Whatever the parent's needs and plans or lack thereof, it is essential for those providing services to ascertain the perceived needs of parents and the nature and extent of their planning in order to make the best use of the resources available and to meet the diverse kinds of needs of different types of families, for as Mittler (1979) noted, planning ahead is a recognized hallmark of effective service delivery.

Research Goals

We seek to construct an instrument that will enable researchers to determine: (a) what parents of young persons with handicaps perceive to be the present and future needs of their offspring and in what priority, (b) what parents have planned for the future of their offspring, (c) how parents perceive the role that education, rehabilitation, and transition services should play in the present and future provision of services, and (d) what parents find difficult about becoming involved in the present transition planning process. In addition, this instrument will categorize different types of families according to specific needs.

The confidentiality of participating families is assured during every phase of the research. The names and locations of participating families will be known only to the principal investigator and her graduate research assistant. Direct quotations used in the report will not be attributed, and biographical facts will be changed to preclude recognition of the subjects.

Phase 1: The Construction of a Research Instrument (12/14/87-9/15-88)

Methodology

To be able to construct a questionnaire for use with parents, a preliminary study was initiated in order to discover what the overall concerns of parents of young persons with handicaps were and which concerns were specific to certain groups. This study uses a specially developed in-depth interview technique coupled with empirical methods of data analysis developed earlier by the principal investigator (Lundstrom-Roche, 1982, 1985). This interview technique is in the style developed by anthropologists and more recently phenomenological sociologists and ethno-psychologists, called the Emic technique (Gregersen, 1977; Pike, 1954).

"Emic" and its opposite "Etic" both come from the field of linguistics and are foreshortened versions of "phonemic" and "phonetic". A phoneme is a speech-sound considered in respect of its holistic functional relations in a linguistic system--it describes meaning. Phonetics are vocal sounds applied to signs which represent the elementary sounds of speech or which express the pronunciation of words--they describe structure.

Researchers using the Emic technique attempt to shed their own biases and those derived from their culture in order to try to see the world through the yes of the individual being interviewed. The philosophy behind this technique is that the description of the form and meaning of a culture or subculture will necessarily differ from the description and interpretation of that culture by outside observers whose own culture or subculture has taught them a different set of values. Other forms of research (e.g., those using questionnaires and structured interviews) may depict a subculture quite differently from the way its members view it, possibly placing great importance on items that the members should normally ignore, while overlooking items that the members would never omit (Clifton, 1968). In other words, in an Emic interview the researcher does not impose categories on the topic under investigation, but allows the cultural system to generate its own. The interviewer at all times tires to be a neutral vehicle for the expression of the system (Berlin, 1970).

In conducting an Emic interview the researcher requests the respondent to describe his or her particular world--in this instance being primary caregiver of family in which there is a member with a handicap. The interview might start off with "Can you tell me what it is like to have a teenage daughter (or son) who has special needs /handicap/ who is about to graduate"? Then, based on the reply and using only words and concepts used by the respondent as keywords for further exploration, the researcher continues: "You mentioned [keyword]. Can you tell me a little bit more about that"? Then, based on that reply, the researcher continues in the same way until all keywords have been investigated. By using this technique we hope to gain a culturally unbiased world view of an individual's frame of reference.

In earlier studies (Lundstrom-Roche, 1982, 1985) the present author found that the Emic technique does not encourage individuals to talk about the future. In an attempt to spread the range of information from the past and present into the future, we decided that when all possible avenues have been explored and keywords have been exhausted, the primary caregiver of young persons with handicaps will be asked if she or he has any wishes for the future of the family member who is handicapped and then for the family in general. These wishes (if any) will also then be investigated using the original technique. In the studies, cited above, valuable insight was gained by this addition.

Although this technique may seem simple to implement, like all research designs it has its problems. One such problem is that there are two people involved in the interview situation and thus two "realities"--that of the interviewer and that of the interviewee--which are being exposed to certain underlying factors that may affect the quality of the information. For example, either or both parties maybe nervous, anxious, or tired. (As a researcher-interviewer, one must be ever watchful of the possibilities of becoming overtired to the stage where concentration, awareness, and empathy are not functioning as they should). It should also be pointed out that the researcher is an extraneous variable in any interview situation and should be aware of this factor and attempt to neutralize it as much as possible.

In addition to the above mentioned data collection method, we are using a demographic information questionnaire which has been designed specifically for use in Transition Institute projects involving parents. The questionnaire was designed in cooperation with the Survey Research Lab of the University of Illinois at Urbana-Champaign and is currently being piloted in this first stage of the research. The questionnaire elicits information about the handicapping conditions of children in the family, the family structure, and the education, employment, and other characteristics of the primary caregiver.

We are interviewing the primary caregiver of the young person with a handicap. As far as possible, both parents are not being interviewed together because earlier research (Lundstrom-Roche, 1982) has shown that in a group-interview situation, one individual may be inclined to dominate, although that person may not necessarily have the most knowledge or information to impart. There is no evidence against extending this generalization to parents of individuals who are handicapped.

Data Analysis

The interviews are tape recorded and then transcribed verbatim onto computer text files. Analysis takes the form of: (a) identification of themes (i.e., the different topics mentioned by those interviewed), and (b) frequency of occurrence of various topics as indices of the overall importance of the topic to the sample. This primary analysis will use two qualitative content analysis programs suitable for use on PC's running under MS?DOS. These are: (a) TEXTPACK V and, (b) THE ETHNOGRAPH. These two packages were chosen from more than two dozen computer aided-content analysis programs following a two-month survey by graduate student Kent Hook.

TEXTPACK is a package for the computer-assisted content analysis that has been developed at ZUMA (Zentrum fuer Umfragen, Methoden und Analysen [The Center for Surveys, Methods, and Analyses], Mannheim, FRG. Initially, the package identifies the more frequently occurring words in texts (the program can be instructed to omit such relatively frequent and uninformative words as articles. There is also the possibility of using a customized dictionary thesaurus that provides the researcher with a number of categories. Subsequently the program not only prints out the number of occurrences of these categories but also gives their contexts and identifies the subjects who generated the statements in various categories. (For a description of TEXTPACK, see Weber, 1984).

THE ETHNOGRAPH is designed to facilitate the creation of analytical categories and propositions from qualitative data. Its purpose is to manage some of the mechanical tasks of qualitative data analysis. The program does not identify categories, themes, or key words but facilitates coding text files thematically. The researcher identifies, with embedded block markers, the themes which he/she considers have arisen in the texts, the program can them produce an output file containing sorted, cross-referenced coded segments from the original data set. (For a description of THE ETHNOGRAPH, see Seidel & Clark, 1984).

Weber (1984) states with regards to the use of computer-aided qualitative data analysis programs:

> One of the most important benefits of computer aided rather than hand-coded or interpretive content analysis is that the rules for coding text are made explicit. The public nature of the coding rules yields tools for inquiry that, when applied to a variety of texts, generate formally comparable results. (p. 127)

These two programs will be piloted on the data collected in Phase 1 in order to choose the one of greater value in analyzing such data, and the package selected will be used in later phases of the study.

The demographic data collected in conjunction with the interviews are being coded and entered on computer files for use with the qualitative data set.

We plan, overall, to interview the primary caregiver in approximately 35-40 families having a member who is handicapped and about to graduate, from high-school or equivalent. To concept, we will compare parents who do not belong to any support or advocacy group, including blue and while collar workers from white, black, and other minorities living in rural and urban settings, with white, middle-class parents who are involved in support or advocacy groups.

A complete report outlining the research findings will be ready by August 21, 1988.

Summary Year 1 Activities (12/15/87-5/15/88)

The initial part of the startup of the project was the writing of a draft proposal, which we completed by early January 1988. It was then sent to four reviewers:

Professor Nick Smith
Syracuse University

Professor Dianne Berkell
Long Island University

Dr. Donn Brolin
University of Missour-Columbia

Ms. Marge Goldberg
Pacer Center, Inc.
Minneapolis, MN

At that time the proposal was also submitted to the Institutional Review Board and the Bureau of Educational Research at the University of Illinois. Approval was received from both units in mid-January, 1988. Reviewer's comments arrived in February, and we amended the proposal according to their suggestions. The School Boards in Champaign and Urbana school districts were also contacted, and in mid-February we gave presentations outlining the aims of the study to both boards. With the approval of the school boards we were able to set up liaison with Special Education teachers in Champaign's two high schools and with the Principal and Pre-Vocational Coordinator in Urbana High School.

The Urbana High School staff were particularly interested in the research, because during the previous semester they had initiated a Student Transition Experience Program (STEP) to provide transition services for their students in special education.

During this time also, graduate student Kent Hook was assigned to check into qualitative data analysis possibilities on campus and to survey which types of computer-aided content analysis programs were available for use on IBM PC's and XT's.

During this time also, the Principal Investigator, members of the Institute faculty and staff, and a consultant at the Survey Research Lab all contributed of their knowledge and expertise in designing a demographic questionnaire for use in this and other studies involving parents, which will carried out under the ages of the Institute now and in the future. The information thus gathered will be invaluable for building up a data base of parent profiles for use in secondary data analysis.

Hill, Seyfarth, Orelove, Wehman, and Banks (1985) point out that reaching the parents or guardians of persons who are mentally handicapped has become increasingly and necessarily difficult in recent years. Because of legal constraints of clients' confidentiality, there is no list of parents who have handicapped children and therefore no easy method of obtaining a sampling frame. Our study has been no exception to the problem.

The schools in Urbana and Champaign were unable, for reasons of confidentiality, to release the names of the parents who have children attending special education classes. Consequently, in late February, 1988, in cooperation with staff of Urbana High School, letters from the Principal of the school and from the Principal Investigator including consent (to be interviewed) forms and a stamped self-addressed envelope were sent to all 70 parents whose children were enrolled in Special Education programs in the school. This strategy was to be the main thrust for recruiting subjects for the first phase of the study. Incredibly, out of these 70 parents, only four returned signed consent forms. As some difficulties with response rates had been anticipated, we had planned as a back-up strategy that the Special Education teachers at the Champaign School District's two high schools would present (face-to-face) a similar letter and consent forms to parents when meeting them for IEP conferences. These conferences started April 11, and parental response has been more positive. To date a total of 23 parents have consented and 18 have been interviewed.

Preliminary and Tentative Findings from Initial Interviews

To date, the bulk of the parents interviewed have children who are learning disabled. The tentative and preliminary results outlined below may only pertain to this first group of parents and children. These findings are:

- Almost all parents feel their children "slipped through the cracks" (their words) of the educational system. That is, their children's special needs were not identified at the early age the parents felt was appropriate. There was also the feeling among parents that the label or diagnosis was more important to school authorities than was giving remedial help.
- Most parents seem to have given some thought to what their children would be doing after graduation. All parents seemed to be unaware that help was available in making plans for the future. It was as if IEP

meetings were rituals to be conducted for the benefit of the school's and for the present education of the students, but had no bearing on their future life.

- It is not apparent that parents perceive they should become involved in the decision-making process regarding their children's education at high school level.
- Families may fall into categories, not as defined by socio-economic status or ethnic group but by parenting styles. There seem to be two, if not three, distinct parenting styles. These styles are (a) Supportive--providing an atmosphere of warmth and acceptance without being overprotective; (b) Dependent--providing warmth and acceptance but also highly protective, and (c) Conflict-ridden--strained relations between parent and child, with parents experiencing problems in coming to terms with the handicap and its associated stigma. (These three styles were originally identified by Zetlin, 1985.)

Phase 2: Construction of Testing the Research Instrument (9/15/88-5/15/88)

The results of the study outlined above will be used in conjunction with previously formulated questions pertinent to themes identified, which will then be examined for possible use in constructing a questionnaire for use with parents of young persons in transition from school to work. The CATI (Computer Assisted Telephone Interview) system at the Survey Research Lab (SRL) is being considered to test the pilot questionnaire. Its construction will be formulated in conjunction with SRL to develop an instruction for use with a broad spectrum of parents of young persons with handicaps. Pursuant to this plan and because of the difficulties in obtaining subjects outlined above, parents whose children attend Special Education classes in Urbana High School are being asked while attending the

IEP conferences at that school during May 1988 to sign a consent form permitting the research team to interview them during the fall.

Running parallel to the above study, we propose a smaller, independently funded study of the transition hopes and aspirations of the students in the Special Education Program at Urbana High School. The idea for this study arose because the teachers, the Pre-Vocational Coordinator, and the special education resource team at the school, with whom the Principal Investigator has been working closely, suggested that only interviewing parents might give a distorted picture of problems encountered by families during transition. The teachers observed that the interactions (negative and positive) between parents and their children play an important part in whether transition is successful. If funding for this study materializes, a much more detailed picture of the family in transition will be available for further research. Another advantage will be a deeper understanding of the dynamics involved between the different family types and their graduating type is the main factor involved in successful transition. A management for Phase 2 is attached.

Phase 3. Statewide Field Trials of Research Instrument and Detailed Data Analysis (9/15/88-9/15/90)

After refinement and rigorous testing of the questionnaire, using target families described above, a random sample of Illinois parents of young persons with handicaps will be selected, contacted, and interviewed, using CATI. In view of the difficulties in obtaining subjects, the groundwork for getting access to these parents will begin as early as September 1988.

The parent author intends to use a sampling technique outlined in Lundstrom (1981). All high schools in Illinois will be randomly sampled and, if possible, the primary caregivers of all students will handicaps who are attending these schools will be interviewed using either CATI or face-to-face interviewing. Citing Stuart (1968), Lundstrom notes that "if one assigns the institutions [schools] randomly to fieldworkers and uses identical survey methods, them...the result is virtually an experimental design (with both control and experimental groups)" (p. 212). Stuart (1968) argues that this strategy eliminates the problem of bias. He also suggests that this method is an excellent way to check fieldworker's performances and determine whether further training or other action is indicated.

Data analysis of this stage of the project will give a very strong indication of the role parents play in the transition process, and their perceived expectations and needs (if any) for services both before and after graduation.

Unlike many previous surveys of parents (e.g., Hill et al. 1986; Polifka, 1981), ours does not intend at any stage to make use of a postal questionnaire, because we suspect the reason for low response rates in the above-mentioned and other surveys could have been the literacy problems of some parents.

Analysis of the resulting data should identify homogeneous groups of parents with different needs and priorities as hypothesized above and also give a clear picture of the transition and other needs of parents of young persons with handicaps.

Phase 4: Training and Dissemination of Information (5/15/88-5/15/90)

Because many agencies have traditions of doing in-house research, this instrument will be made available nationally to interested agencies. Training and information seminars will be held in central locations for groups of agencies from which a request for information on the research has been received to give details of use of the research instrument in (a) sampling, (b) administration of the questionnaire, and (c) appropriate data analysis techniques.

Phase 5: A National Database of Information

If a sufficient number of agencies undertake monitoring the needs of parents of young people with handicaps using our questionnaire, then the present author suggests that the results by compiled and the data reanalyzed. A research document giving the overall picture nationwide would be an invaluable source of information for those involved in the planning of transition and other services for young persons with handicaps and their parents.

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Management Plan for Year 4

TASK 4.4: Parents of young persons with handicaps in transition

Task Manager: Francesca Lundstrom

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
4.4.1	Prepare and give results of research for Year 4 to teachers and participating parents	Paper	9-1-88	10-1-88	FL
4.4.2	Search for previously formulated questions pertinent to themes in Year 4 study	Questions	9-1-88	10-1-88	FL, GRA
4.4.3	Construct a sampling frame within Illinois State school system	Sampling frame	9-1-88	12-1-88	FL, GRA
4.4.4	Construct a questionnaire reflecting the concerns of parents in Year 4 study	Draft questionnaire	10-1-88	11-1-88	FL, GRA
4.4.5	Consult with Survey Research Lab (SRL) on content and format of questionnaires	Questionnaire	10-1-88	11-1-88	FL, GRA
4.4.6	Cost different methods for questionnaire administration (e.g., by telephone, face-to-face)	Cost analysis	10-1-88	11-1-88	FL, SRL
4.4.7	Pilot questionnaire on parents of children in Special Education in Urbana High School. (Permission to interview parents was sought in May '88.)	Data	1-1-89	3-1-89	FL, GRA, SRL
4.4.8	Consult with SRL on refining questionnaire further	Final draft of questionnaire	2-1-89	3-15-89	FL, GRA, SRL
4.4.9	Sampling schools within State of Illinois, obtaining parent permission to interview them	Sample of schools & parents	1-1-89	4-1-89	FL, GRA
4.4.10	Analysis of data collected from Urbana parents.	Data set	3-15-89	5-15-89	FL, GRA
4.4.11	Write report for this phase of study	Report	5-15-89	9-1-89	FL

FL - Francesca Lundstrom
GRA - Graduate Research Assistant
SRL - Survey Research Lab

TASK 4.5: Assessing and Facilitating Employers' Positive Acceptance of Employees with Handicaps

(Dr. Adelle Renzaglia)

Overview of Year 4 Activities

Year 4 of the Employers' Acceptance Research will focus upon the identification of intervention strategies that may be implemented in order to increase positive employer attitudes toward individuals with disabilities. Literature will be reviewed and national experts will be contacted regarding effective methods for facilitating positive employer acceptance of employees with handicaps. In addition, results of the survey previously conducted with employers in the southeast and central regions of the United States will be used to identify variables that appear to affect employer acceptance and that may have potential for change in order to target areas in which intervention may be appropriate. A model (or models) will be developed, incorporating strategies that have been identified, to increase positive employer acceptance. Feedback from national experts will be obtained regarding the proposed model components, and revisions will be made based upon feedback.

The intervention model(s) designed to facilitate positive employer acceptance will be field tested on three employers, and model effectiveness will be evaluated via a pre-test and post-test analysis using the Business/Employer Assessment Instrument (BEAI). The model(s) will then be modified based upon field test results. After field testing and revision, the intervention model(s) will be evaluated based upon implementation with at least five employers.

Management Plan for Year 4

TASK 4.5: Assessing and Facilitating Employers' Positive Acceptance of Employees with Handicaps

Task Manager: Dr. Adelle Renzaglia

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
4.5.1	Review relevant literature related to changing employer attitudes toward acceptance of workers with handicaps	File of relevant literature	8-21-88	9-21-88	AR, MH, JG
4.5.2	Confer with national experts regarding effective methods of facilitating employer acceptance	Record of contacts and suggestions	8-21-88	9-21-88	AR, MH, JG
4.5.3	Identify variables that are related to employer acceptance and have potential for change using an intervention strategy(ies)	Changeable and non-changeable variables	8-21-88	9-21-88	AR, MH
4.5.4	Identify strategies (or model components) that have or could increase positive employer acceptance	Strategies/model components	9-22-88	10-30-88	AR, MH
4.5.5	Develop a model(s) for facilitating positive acceptance that incorporates strategies/ components previously identified	Model(s)	11-1-88	12-15-88	AR, MH
4.5.6	Obtain feedback from experts regarding perceptions of model effectiveness	Record of feedback	1-1-89	1-31-89	AR, MH, JG
4.5.7	Revise model(s) based on feedback	Revised model(s)	2-1-89	3-1-89	AR, MH
4.5.8	Pilot model(s) with up to 3 employees using the BEAI pre-test and post-test measure to assess model effectiveness	Pre-test & post-test results	3-2-89	4-30-89	AR, MH, JG
4.5.9	Modify model for facilitating employer acceptance based on field test	Modified model	5-1-89	5-31-89	AR, MH
4.5.10	Utilize model with at least 5 employers	Pre-test & post-test results	6-1-89	7-31-89	AR, MH, JG
4.5.11	Develop a manuscript based upon results of data analysis	Manuscript	8-1-89	9-1-89	AR, MH

AR - Dr. Adelle Renzaglia
MH - Meg Hutchins
JG - Joy Gray

TASK 4.6: Policy Analysis

(Dr. Lizanne DeStefano)

Overview of Year 4 Activities

Federal transition policy has been defined in very broad terms. It neither mandates the delivery of transition services nor specifies particular guidelines for its implementation. Federal transition policy is an umbrella strategy providing significant discretion for state planning.

The first step in the implementation of broad federal intention is state level planning: the specification of goals and administrative arrangements congruent with the state context. This level of planning specifies state intention regarding both ends and means.

Phase 1 . The purpose of this Phase is descriptive. Its objective is to provide the reader with a broad overview of the extent and nature of state transition planning based upon a comprehensive collection of state plans.

Three key questions, along with subquestions, are proposed:

1. How extensive is state transition planning?

   How many states have:

   a. enacted transition legislation?
   b. formal transition plans?
   c. informal transition plans?
   d. a plan being formulated?

2. What are the common elements and unique features of transition planning across the states?

   Categories to be considered include:

  - a. goals
  - b. administrative structures
  - c. funding mechanisms
  - d. agencies involved
  - e. populations served
  - f. local involvement in planning

3. How extensive is planning for interagency coordination?
   - a. how many states have interagency agreements?
   - b. what agencies are involved?
   - c. how are their roles defined?

In addition to the above questions, a theoretical framework, which views planning responses to problems as "policy instruments," will be used to categorize each plan. Four types of policy instruments have been identified: mandates, inducements, capacity-building, and system change. Each state plan will be categorized in terms of one of these four instruments, providing a concise organization of state plans in terms of their fundamental characteristics.

Further, each policy instrument presents a core strategic problem unique to it. Knowing what type of instrument a plan represents will help identify potential problems in the implementation of the plan, problems which may not have been adequately addressed in its original design.

Phase 2. In order to provide a richer comparison, a longitudinal analysis is proposed. In 1980, the Office of Career Development for Special Populations collected a compendium of state interagency agreements between vocational education, special education, and vocational rehabilitation. It is hypothesized that these agreements were the forerunners to current state transition planning.

Our concern here is with organizational learning. It has been found that when planning emerges from past experience, being modified in accordance with changing conditions, it has a greater chance of being successfully implemented. In this case, learning is operative; the organizational response has an experiential foundation. The primary questions to be asked here are: To what degree are states basing current transition planning on past interagency agreement? What has been learned by states who have past interagency agreements as compared with those who do not? Does this learning make a difference? The answers to these questions will help planners design strategies what will improve service delivery now and in the future.

Phase 3. Nine states currently have legislation related to transition. Phase III will be devoted to determining what effect the enactment of state transition legislation has on state planning. Do those states with legislation have similar plans (e.g., in terms of instruments)? Is there a significant difference in planning between those states that have legislation and those that do not? How do demonstration projects funded under federal legislation compare with those funded under state legislation? This phase will help determine the importance of state legislation regarding the implementation of transition interventions.

Management Plan for Year 4

TASK 4.6: Policy Analysis

Task Manager: Dr. Lizanne DeStefano

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
4.6.1	Create transition plan data base using dBase III software	Data base	6-30-88	10-15-88	LD, DS
4.6.2	Conduct descriptive analysis of state transition plans	Journal article	9-15-88	12-1-88	LD, DS, AP
4.6.3	Develop coding scheme for interagency agreements	Coding manual	8-20-88	9-20-88	LD, DS, AP
4.6.4	Complete comparative analysis of interagency agreements and state transition plans	Journal article	10-15-88	2-15-89	LD, DS, AP
4.6.5	Identify model demonstration projects and contact persons in states with transition legislation	List	9-15-88	10-15-88	DS
4.6.6	Design survey to assess extent of implementation of state legislation in model demonstration projects	Survey	12-15-88	2-15-89	LD, DS, AP
4.6.7	Survey implementation		2-15-89	6-15-89	DS
4.6.8	Analyze implementation data	Journal article	6-15-89	8-15-89	LD, DS, AP

LD - Dr. Lizanne DeStefano
DS - Dale Snauwaert
AP - Allen Phelps

TASK 5: Technical Assistance

(Dr. Jane Dowling and Cynthia Hartwell)

Summary of Year 3 Activities

Activities conducted during Year 3 were largely a continuation of the major TA activities: planning/conducting three regional workshops; conducting telephone, electronic, and mail technical assistance; and conducting on-site technical assistance visits. The following summary is presented according to the activities stated in the Year 3 management plan.

Review and analyze project evaluation plans in funded applications. The Evaluation Analysis Worksheet (EAW) developed in Year 2 underwent a final revision in fall 1987. The new format permitted TA staff to glean information from project grant applications more effectively, informal input received from field sites, and a review of Worther and Sanders' (1987) chapter, "Planning the information collection, analysis and interpretation." The EAW data base file was subsequently revised. As stated previously, priority for completing a project EAW includes registration for a regional workshop, request for evaluation TA, newly funded project or on-site evaluation TA. The average completion time for an EAW is 4 hours. Review and entry of the EAW on computer data base is an additional 2.5 hours. Owing to the amount of time involved in completing and entering an EAW, projects that do not belong to any of the above categories are given lowest priority. To date, 95 EAWs have been completed and reviewed with projects.

Develop topical papers for Evaluation Technical Assistance Series. The Dissemination Series was introduced in Year 2 with dissemination of topical papers continuing in Year 3. Each project has received a 3-ring binder, and as the papers are produced, they are copied on 3-hole paper for easy insertion. Upon dissemination of each paper, a revised table of contents is sent to the project directors.

Survey project directors for TA needs. Minor revisions were made to the Evaluation Technical Assistance Needs Survey for Year 3. The five evaluation categories were retained; however, a sixth section was added, Applying Evaluation Standards. The survey instrument was disseminated to the directors of 87 active projects.

The Needs Assessment Survey asked project respondents to rate selected evaluation topics with five evaluation areas on two levels. Respondents were first asked to rate the importance of the evaluation topic on a 4-point Likert scale (1 = not important at this time; 4 = very important at this time). After rating the importance of the topic, the respondents were then asked to rate their need for technical assistance on the specific topic. This rating was also on a 4-point Likert scale (1 = low need for technical assistance; 4 - high need for technical assistance). In addition to the selected evaluation topics, project respondents were asked to rate their need for technical assistance in applying evaluation standards. The evaluation standards listed were developed by the Joint Committee on Standards for Educational Evaluation (1981). As a result of previous needs surveys and input from projects attending regional workshops in Year 2, 12 selected topics were listed for consideration as context area needs. Respondents were asked to choose five topics from the list that were considered important in the current phase of the project and to rank the selected topics according to level of importance.

The targeted sample of the Evaluation TA Needs Survey included all the project directors (or their appointees) of the OSERS-funded secondary and transition model demonstration projects who had active projects as of

October 1, 1987. A total sample of 86 projects was identified. The survey was mailed to the total sample on September 21, 1987. A follow-up reminder to return the survey was sent on October 15, 1987. Fifty-one of 86 (59%) of the projects responded.

Based on the results of the survey, project respondents rated the general evaluation topic of "Identifying Evaluation Focus" as being the most important in the current phase of their projects. The five individual topics receiving the highest input rating were: 4, 5, 7, 13, and 1. The five specific areas receiving highest need for evaluation TA ratings included: 28, 26, 25, 7, 4, and 5.

The three areas (from a field of 13) that were the most frequently selected by projects responding included:

1. Data collection/data analysis
2. Student progress documentation
3. Project continuation upon funding expiration

The identified needs and importance ratings obtained from the survey provided TA staff with a guide for developing the Year 3 TA Play. The regional evaluation TA workshops were designed to address specific content areas and evaluation topics rated highest in importance and need by project respondents.

In addition to the formal needs survey, registrants for TA workshops were given the opportunity to identify key issues for workshop topic consideration. The EAW also continued to provide TA staff with a mechanism for identifying evaluation concerns that needed to be addressed. On an informal basis, project needs were continually assessed through telephone conversations, letters, individual meetings, and site visits.

Develop TA Plan and Schedule

The Evaluation Technical Assistance Needs Survey conducted in September provided the basis for the Evaluation TA Program plan and schedule for Year 3. Sites for regional workshops, tentative topics for workshops, and potential project site visits were identified. Based on the results of Year 2 plan it was decided to continue utilizing the specific procedures outlined for delivery of evaluation TA.

Plan and Conduct Three Regional Workshops

Three regional workshops planned and conducted during Year 3 were attended by 63 persons representing the following individual competitions:

CFDA#	# Attending Workshop	% of Workshop Participants
84.023D	0	-
84.023G	1	2
84.078B	0	-
84.078C	32	51
84.086M	5	8
84.128A	5	8
84.158A	2	3
84.158B	0	-
84.158C	14	22
84.158L	4	6
	63	100

(The preliminary announcement of workshops 1 and 2 and registration information were sent to projects on August 12, 1987.) The 1st Regional Evaluation TA Workshop for Year 3 was held on October 28, 1987, preceding the Annual TASH Conference in Chicago. Registration confirmation and a tentative agenda were sent upon receipt of the project registration form for the Chicago workshop.

Two workshops presentations were schedule for the Chicago workshops. Drs. Jane Dowling and Robert Stake were the major contributors. The two topics were (a) Program Evaluation and Review Technique, and (b) Case Study Methodology.

The 2nd Regional Evaluation TA Workshop was held on December 9, 1987, preceding the Project Directors' Third Annual Meeting in Washington, DC. Registration confirmation and a tentative agenda were sent to workshop registrants during October, with a final agenda mailed on November 9, 1987. Two major presentations "Practical Strategies for Applying Professional Evaluation Standards to Project Evaluation Plans." Dr. Craig Thornton's topic was "Application of Benefit-Cost Analysis to Transition Studies."

The 3rd Regional Evaluation TA Workshop was held March 14 and 15, 1988, in San Diego, California. The focus of the first day was analyzing the feasibility of achieving an evaluation's purpose. Dr. Jane Dowling and Cynthia Hartwell (TA Program Staff) were the featured presenters, and the topics included: program analysis, feasibility analysis, conducting impact evaluations, and enhancing program evaluability. The featured presentation, "Project Developed Instrumentation," was made by Dr. Ron Jacobs in a half day session on March 15.

Evaluation TA staff scheduled the workshops and selected and booked dates and locations for the first and third workshops; developed and disseminated workshop announcements, registration forms, and preliminary agendas; prepared workshop packets; arranged for featured presenters (providing presenters with profiles of registered projects and advising on topics); conducted the workshops; provided individual evaluation TA to projects as requested; and conducted follow-up sessions with workshop participants.

At the conclusion of each workshop, participants were asked to complete a workshop evaluation form which was designed to assess participants opinions regarding general areas of workshop organization, workshop program (appropriateness of workshop topics, individual presentations, and quality of workshop), and workshop utility. The following chart is a synthesis of workshop evaluation results. Participants were asked to use a 4-point Likert scale (1 = poor; 4 = excellent).

	Chicago Workshop #1	DC Workshop #2	San Diego Workshop #3
Workshop Organization	3.6	3.49	3.7
1. Preworkshop planning, information and registration	3.6	3.68	3.67
2. Meeting rooms/workshop facilities	3.5	3.3	3.78
Workshop Program	3.55	3.25	3.64
1. Appropriateness of workshop topics	3.5	3.3	3.78
2. Individual presentations			
a. Case study methodology	3.1		
b. Program evaluation and review technique	4.0		
c. Practical strategies for applying professional standards to project evaluation plans		3.3	
d. Application of benefit-cost analysis to transition studies		3.03	
e. Program analysis and feasibility analysis			3.56
f. Impact evaluation and enhancing program evaluability			3.44
g. Project developed instrumentation			3.78
3. Quality of workshop	3.6	3.3	3.67
Workshop Utility	3.5	3.18	3.5
1. Utilization of case study information	3.4		
2. Utilization of pert information	3.6		
3. Utilization of strategies for applying standards		3.57	
4. Utilization of benefit-cost analysis		2.77	
5. Project evaluation analysis worksheets			3.67
6. Evaluation feasibility			3.56
7. Impact evaluation			3.22
8. Instrument development			3.6
Information Exchange during Workshop	3.4	3.21	3.6

Conduct Telephone, Electronic and Mail TA

TA staff continued to provide Evaluation Technical Assistance to projects at five levels as designed in Year 2. The highest level of evaluation TA provided to projects in the various competitions is outlined on the following:

Level 1

* Needs assessment survey
* Project characteristics questionnaire
* Dissemination Series Paper #3:

* Dissemination Series Paper #4:

* Letters from evaluation TA staff
* Workshop correspondence
* Telephone calls as needed

Level 2

* Same as Level 1 and
* Specific telephone response to project staff questions regarding project activities

Level 3

* Same as Level 1 and
* Specific telephone response
* Follow-up written correspondence by evaluation TA staff
* Topical materials related to project request

Level 4

* Same as Level 1 and
* Individual meeting with evaluation TA staff person
* Review of Evaluation Analysis Worksheet by evaluation TA staff
* Follow-up written correspondence by evaluation TA staff
* Topical materials related to project concerns

Level 5

* Same as Level 1 and
* Site visit by evaluation TA staff person
* Review of Evaluation Analysis Worksheet by evaluation TA staff
* Follow-up written correspondence by evaluation TA staff
* Topical materials related to project concerns

Attachment contains samples of materials and follow-up correspondence with projects at Levels 3, 4, and 5.

Level of Evaluation TA Provided to Projects by Competition

CFDA#	Level 1	Level 2 TI#	Level 3 TI#	Level 4 TI#	Level 5 TI#
84.023D	All (n = 12)	8, 11	8		
84.023G	All (n = 15)	59, 53	59	59	
84.078B	All (n = 15)	89, 88, 84, 85	85, 84, 90		90, 85, 84
84.078C	All (n = 47)	166, 156, 153, 155, 116, 154, 124, 103, 159, 123, 160, 111, 157, 170, 118, 161, 167, 126, 117, 121, 151, 162, 163, 127, 115, 152, 168	151, 152, 115, 153, 154, 155, 116, 126, 127, 156, 157, 117, 111, 124, 103, 161, 159, 162, 160, 120, 118, 166, 167, 168, 170, 121, 164	164, 166, 116, 154, 124, 156, 159, 160, 157, 161, 167, 111, 103, 121, 151, 155, 162, 153, 127, 115, 152, 126, 168, 170	162, 103, 124, 159, 160, 155, 116, 115, 151, 152, 121, 164
84.086M	All (n = 11)	142, 146, 146, 145, 150, 140	147, 146, 145, 142, 144, 148	145, 149, 142, 144	
84.128A	All (n = 5)	82, 80	82		
84.158A	All (n = 24)	30, 34, 27 30	23, 25, 27, 30, 34	30, 34	30, 29
84.158B	All (n = 11)	78			
84.158C	All (n = 39)	134, 130, 164, 42, 190, 189, 138, 184, 191, 131, 43, 188, 135, 136, 183, 181, 186	134, 138, 40, 184, 186, 187, 188, 189, 48, 139, 136, 190, 130, 191, 131, 183, 185	134, 190, 184, 191, 188, 186, 183, 189	184
84.158L	All (n = 10)	171, 176, 175, 173, 179, 177 178	171, 173, 175, 176, 177, 172	175, 173, 171, 176, 177, 174	177, 176

Telephone logs and correspondence logs are maintained by evaluation TA staff in order to document the track project communications. A Communication Action Record form and Individual Meeting form are used to document further project communications and any action taken by evaluation TA staff.

A total of 59 TA phone calls were completed, and 95 personal TA letters were sent. In addition to specific written TA communication, general project written correspondence included 87 transmittal memos for Evaluation TA Needs Assessment; 181 workshop announcement memos for the 1st and 2nd regional TA workshops; 181 transmittal memos for working paper #1; 181 transmittal memos for project characteristics questionnaire; 42 transmittal memos for Dissemination Series binders; 181 transmittal memos for working paper #2; 63 regional workshop follow-up registration confirmation memos; 181 workshop announcement memos.

Conduct On-Site TA and Follow-up Activities

On-site evaluation technical assistance was provided for 19 projects during Year 3. The procedures for conducting the site visit were similar to the procedures established in Year 2. Telephone and written communication between TA staff and project site director preceded all site visits. Before the visit, TA staff complete an Evaluation Analysis Worksheet for each project to be discussed and compile specific materials related to EAW findings and project requests. Subsequent to the site visit, TA staff completed individual meeting reports and specified required follow-up activities to be conducted. Follow-up was documented as it was completed. The following projects were the recipients of on-site technical assistance.

CFDA#	Location	Project #
84.078C	New York, NY	162
84.158L	New York, NY	177
84.078B	New York, NY	90
84.158L	New York, NY	176
84.158A	New York, NY	30
84.078B	Albertson, NY	85
84.158A	Albertson, NY	29
84.078C	Albertson, NY	103
84.078C	Bayside, NY	124
84.078C	New York, NY	159
84.078B	New York, NY	84
84.078C	New York, NY	160
84.078C	DeKalb, IL	155
84.078C	Ft. Collins, CO	115
84.158C	Ft. Collins, CO	184
84.078C	Denver, CO	151
84.078C	Golden, CO	152
84.078C	Laramie, WY	121
84.078C	Charlotte, NC	164

Summarize and Evaluate TA

Monthly reports submitted to the Director of the Institute provided the basis for formative evaluation of the TA program. Analysis of MRS also contributed to the evaluation of the efficiency of evaluation TA activities.

Summary data collected for the monthly report permitted the reporting of progress and subsequent completion of TA activities. In addition any slippages and reasons for slippages were reported on a monthly basis.

Formal evaluation of TA Regional Workshops was conducted upon completion of the specific workshops.

Plan Evaluation TA for Year 4

The Annual Report for Task 5 - Evaluation Technical Assistance was written by TA staff and submitted to the Director of the Transition Institute. The TA management plan for Year 4 outlines proposed regional workshops, site visits, and topical papers.

Management Plan for Year 4

TASK 5: Evaluation Technical Assistance

Task Manager: Technical Assistance Program Director, TBN

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
5.1	Review and analyze project evaluation plans in funded applications	Evaluation Analysis Worksheet	8-22-88	ongoing	TBN, CH
5.2	Develop topical papers for Evaluation Technical Assistance Dissemination Series	Four topical papers	8-22-88	10-21-88, 1-21-89, 3-21-89, 5-21-89	TBN, CH
5.3	Survey project directors for TA needs	Needs assessment instrument Telephone log & notes from post-meeting calls	8-22-88	ongoing	TBN, CH
	- administer needs assessment instrument via mail		9-19-88	10-21-88	CH
	- make follow-up calls to directors/administrators		10-21-88	ongoing	TBN, CH
5.4	Develop TA plan and schedule	Written plan & proposed schedule based on needs assessment	10-24-88	ongoing	TBN, CH
5.5	Plan and conduct three regional workshops		8-22-88	11-88, 2-89, 5-89	TBN, CH
	- decide on topics and sites	Agenda	8-22-88	9-88	TBN
	- make hotel, room, food, A-V arrangements	Letters finalizing arrangements	8-22-88	9-88, 11-88, 3-89	TBN
	- Develop letters of invitation or other public information documents/strategies	Letters	8-22-88	9-88, 12-88, 3-89	CH
	- Contact model projects in geographical area	Project directory	8-22-88	9-88, 12-88, 3-89	CH
	- Finalize agendas	Agenda	8-22-88	10-88, 1-89, 4-89	TBN
	- Prepare internal evaluation forms	Workshop evaluation form	8-22-88	10-88	CH
	- Prepare packet of materials	Packets of materials	8-22-88	11-88, 1-89, 4-89	CH
	- Conduct workshops		8-22-88	11-88, 2-89, 5-89	TBN, CH

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
	- Prepare evaluation report and summary of workshop(s)	Evaluation summary	8-22-88	12-88, 3-89, 6-89	TBN, CH
5.6	Conduct telephone, electronic and mail TA		8-22-88	7-31-89	TBN, CH
	- Make telephone calls to projects in accordance with TA plan	Project contact sheet	8-22-88	ongoing	TBN, CH
	- Use electronic mail & bulletin board on SpecialNet in accordance with TA plan	Messages/response to questions on SpecialNet; log for recording	8-22-88	ongoing	TBN, CH
	- Use correspondence TA in accordance with TA plan	Letters; packets of materials; follow-up letters	8-22-88	ongoing	TBN, CH
5.7	Conduct on-site TA and follow-up		9-88	ongoing	TBN, CH, IRF
	- Select 8 regional sites for on-site TA according to specified selection criteria	List of sites selected with names & address	9-88	ongoing	TBN, CH
	- Contact sites regarding site visit	Letters/calls to selected sites	9-88	ongoing	TBN
	- Plan site visits	Agendas	9-88	ongoing	TBN, CH
	- Make hotel/travel arrangements	Tickets/reservations, etc.	9-88	ongoing	CH
	- Conduct site visits	Site visit report	9-88	ongoing	TBN, CH, IRF
	- Follow-up special requests inquiries	Packets of materials; letters/messages	9-88	ongoing	TBN, CH, IRF
5.8	Summarize and evaluate TA		8-22-88	ongoing	TBN, CH
	- Internal TA staff summarize TA provided	TA monthly reports	9-21-88	monthly	TBN
	- Project staff evaluate TA	Survey evaluating TA provided during year	9-22-88	5-30-89	TBN
		Evaluation results and report	8-22-88	5-30-89	TBN
5.9	Plan TA for Year 5	TA plan	5-1-89	6-30-89	TBN, CH
	- Review activities for Year 4	Internal annual report	5-1-89	5-15-89	TBN
	- Analyze existing project needs	Internal report	5-1-89	5-15-89	TBN
	- Develop TA plan for Year 5	Written TA plan	6-2-89	6-15-89	TBN, CH

TBN - To be named
CH - Cynthia Hartwell
IRF - Institute Research Faculty

TASK 6.1: Model Program Data Base

(Dr. Jane Dowling and Cynthia Hartwell)

Summary of Year 3 Activities

Since 1984, 180 model demonstration projects have been funded under the Transition Initiative. The primary purpose of Task 6.1, Model Program Data Base, is to collect, summarize, and disseminate information about these model projects. In order to analyze the impact of project activities on transition as a national priority, the Transition Institute at Illinois maintains a model program data base. The data base was developed by the Technical Assistance Program staff and is maintained by TA staff on a dBASE III Plus file.

Descriptive data are collected from the current projects through the use of a Project Characteristics Questionnaire (PCQ). Based on the results of the 1986-87 Questionnaire, minor revisions were made to the PCQ. The basic format and the major survey areas remained the same. With the expiration of 104 projects, it was decided to develop a project characteristics questionnaire for expired projects. The Expired Project Characteristics Questionnaire (EPCQ) was designed to allow documentation of those program components being continued by expired projects as well as the identification of products developed and disseminated by the projects. The questionnaire format enabled the project responses to be incorporated into a data base.

Both questionnaires were mailed to the 180 project directors on January 15, 1988. A follow-up memo was sent to nonrespondents on March 1, 1988. TA staff completed PCQs on the active projects for which there was no response after the follow-up memo. These PCQs were sent to the nonresponding project directors for verification of information on April 1, 1988.

There was a 95% response rate by project directors to the PCQ. Those expired projects not responding to the EPCQ were also sent follow-up memos. Further follow-up was not conducted, however, with the second set of nonrespondents. TA staff completed demographic information and project purpose for inclusion in the data base. There was a 56% response rate for the EPCQ.

Project profiles were developed on all current and expired projects based on the information and descriptive data compiled from the questionnaires for inclusion in the 1988 Edition of the Compendium of Project Profiles. The Compendium is produced by the Technical Assistance Program and is disseminated to all projects annually. The Compendium includes five sections:

* The Introduction describes the Federal Transition Initiative and the role of the Transition Institute at Illinois.
* The Overview contains a summary of the descriptive data collected from the projects in each of the current competitions. An overview of the current competitions and an overview of expired project information are provided.
* The Project Profile Section provides a summary of each individual competition; a summary of the projects funded under the competition, both current and expired; and individual project profiles for current and expired projects. The Competition Profile provides a summary of the purpose, authority, eligible recipients, funds available, number of grants awarded, and duration of awards for each competition. The Competition Profile precedes the individual project profiles for each of the 10 competitions. The Summary of Project Profiles contains a summary of the data reported in the individual profiles of current projects for each competition. The Individual Project Profiles provide

a description of each current project funded under the individual competitions. The profile includes project demographic information, project purpose, current focus, primary grantee, cooperating agencies, project participants, project evaluation plan, and project products.

The Summary of Expired Projects Profiles follows the individual project profiles for the current projects and presents an overview of the purpose, focus of continuation activities, project components being continued, and project products reported by the expired projects in each competition. Individual Expired Project Profiles follow each Summary and provide information on the original project purpose and, if reported, the focus of the expired project's continuation activities, the project components being continued and by whom, and the project products available from the project.

* The Index provides a guide to projects' specific evaluation components and program characteristics.
* The Appendixes provide copies of the Project Characteristics Questionnaire and the Expired Project Characteristics Questionnaire.

Major Findings

1. Geographic distribution. Since 1984, 180 model demonstration projects have been funded. As of this writing, 104 projects have expired. The distribution of the 76 currently funded projects is fairly even across the nation with the western third having 23 projects, the middle third having 26 projects, and the eastern third of the nation having 27 projects. Table 1 shows a breakdown of the type of political unit served by projects in the current competitions. Approximately 40% of the projects are located in major metropolitan areas, and at lest 20% of the projects are providing statewide services. An analysis of the political units served by all

projects funded since 1984 indicates an estimated 41% of all the projects have provided services to either regions within a state or on a statewide basis. Approximately 30% of all the projects have served major metropolitan areas.

2. Target population. The youth/adults receiving services through the projects exhibit a range of handicapping conditions. Owing to the priorities of certain competitions (i.e., 84.078C and 84.078B), some projects have targeted specific handicapping conditions. Of those youth currently being served by projects, over one-half have a learning disability and approximately 20% have either a diagnosis of mental retardation or a developmental disability. Other handicapping conditions were reported by projects; however, overall incidences were often less than 10%. Projects were asked to estimate the impact of their project, directly and indirectly, on youth and adults with handicapping conditions. The number of youth/adults being impacted by the current model projects is estimated at 67,656; the estimated number receiving direct services is 11,971. To date, it is estimated that 127,790 youth with handicapping conditions have been impacted by the model demonstration transition projects and approximately 22,567 youth have been receiving direct services.

Current projects were asked to report the total number of youth receiving direct services by specific handicapping conditions. Table 2 presents the percentage of youth/adults with specific handicapping conditions receiving direct services as indicted by those projects reporting on specific handicapping conditions. The "total" column in Table 2 is an estimate of the percentage of youth, by specific handicapping condition, served since the funding of the first model demonstration projects.

3. Related Service Components. Although the target population varies among grant competitions, the majority of projects are offering related service components to parents, teachers, agency personnel, business/industry personnel, and other service providers. More than 90% of the projects reported the provision of some type of related service or training. Across the current competitions, related services/training are reportedly being provided to approximately 2,300 parents, 1,025 agency personnel and 4,000 teachers. Table 3 presents an overview of the various groups receiving related services from the current competitions as well as a total comparison of related services provided to the groups to date.

4. Grant recipients. Eligible recipients of current grant awards are specified for each competition. The most common grant recipients were institutions of higher education, followed by state agencies, private non-profit agencies, and local education agencies.

5. Agency collaboration. A major intent of the transition initiative has been the development of collaborative relationships among agencies. Some grant competitions prioritized the development of cooperative models. Table 4 presents the percentage of current projects indicating cooperation with another agency. The majority of those reporting projects (65%) are cooperating with a state agency. Of those state agencies reported, more than one half were state vocational rehabilitation agencies.

6. Model program evaluation plan. The majority of projects reported using a systems analysis approach to assess the effectiveness and efficiency of their model programs. Several projects reported using systems analysis in combination with other approaches, primarily a goal-based approach. One-third of the projects also reported the use of decision making, professional review, and case study as supplemental approaches. Table 5 presents a

breakdown of the various evaluation approaches being utilized by the projects in current competitions as well as a summary total for projects funded to date that have reported on an evaluation approach.

The type of evaluation data/information being collected by projects varies with the priorities of each competition. Again, the focus on quantifiable evaluation data is apparent across all projects. Table 6 indicates the type of evaluation data/information being collected in each current competition and the percentage of projects reporting the collection of specific evaluation data and information to date.

7. Instrumentation. A variety of commercially available and project developed instruments are being used by projects to collect evaluation information on student/client and to assess specific competency areas. Commercial instruments used to assess academic achievement were most frequently reported by the currently funded projects. Instruments used to assess general ability/intelligence and career interest are being used by approximately one-half of the current projects. At lest one-half of the projects reported use of project/locally developed instruments to collect evaluation information on student/client and program. Table 7 presents the type of commercial and locally developed instrumentation used in each competition.

8. Products. A variety of products are being developed and disseminated by a majority of projects. Brochures describing project activities and journal articles reporting projects findings were cited most frequently as products. Training manuals and project developed instruments are being developed by approximately one-half of the current projects.

9. Project objectives. Project objectives also varied across projects; however, the objectives could be categorized into nine major

areas: assessment/referral, placement/follow-up, education/training, counseling, program development, dissemination/replication/continuation, agency coordination, manpower training and research. Ninety-three percent (93%) of the current projects reported on objectives. Of those projects reporting on objectives, the majority (at least 70%) are specifically involved in such activities as student assessment; development and implementation of a service delivery model; development and dissemination of products; dissemination of information through conferences, presentations, and articles; conducting conferences, workshops, and inservices for purpose of manpower training; and specific training of professionals and paraprofessionals.

Year 3 Products

The Compendium of Project Profiles, the major product associated with this task, is developed and disseminated on an annual basis as a result of project responses to characteristic questionnaires.

TABLE 1

Percentage of Projects Serving Specific Political Units*

POLITICAL UNIT	COMPETITION 84.078C (N=34)	84.086M (N=10)	84.158C (N=22)	84.158L (N=10)	ALL (N=76)	TOTAL (N=180)
Metropolitan area (100,000+)						
with public transportation	50	40	9	70	39	29
without public transportation	0	0	0	0	0	1
Suburb of a metropolitan area	3	0	5	0	3	4
Small town (5,000 - 100,000)						
with public transportation	3	0	14	0	5	3
without public transportation	3	0	0	10	3	1
Rural area	3	-	18	10	8	5
Part of a county	6	10	0	0	4	4
County	0	10	14	0	5	8
Region within a state (including more than one county)	29	10	18	20	22	17
State	12	30	41	0	21	24
Region of nation (more than one state)	6	0	0	0	3	3
Nationwide	0	0	0	0	0	4
Other	6	0	0	0	3	4

N - number of projects reporting

+ - multiple units reported - percentages may exceed 100%

TABLE 2

Percentage+ of Youth/Adults Served in Individual Competitions by Specific Handicapping Condition

	COMPETITION					
	84.078C	84.086M	84.158C	84.158L	ALL	TOTAL
HANDICAPPING CONDITION	N=2920	N=629	N=3670	N=1461	N=8680	N=18877
Autism	0	4	8	0	1	1
Behavioral disorder	1	0	1	0	1	1
Brain damage	1	0	1	0	1	1
Cerebral Palsy	2	3	1	0	1	1
Chronic mental illness	1	17	1	5	2	2
Communication disorder	1	1	1	0	1	1
Deaf-blind	0	2	1	0	1	1
Developmental disability	1	22	3	0	3	3
Emotional disorder	1	1	16	1	7	4
Epilespy	1	1	1	0	1	1
Health impairment	1	0	1	0	1	1
Hearing impairment	1	4	3	2	2	2
Learning disability	85	0	30	83	55	52
Mental retardation	2	32	33	6	18	23
Multiple handicap	1	12	2	1	2	1
Physical handicap	3	1	3	2	3	3
Speech impairment	1	0	2	0	1	1
Spinal cord injury	2	0	1	0	1	1
Traumatic head injury	1	0	1	0	1	1
Visual impairment	1	1	1	0	1	1
Other	1	1	0	0	1	2

(N = number of youth receiving direct services as reported by specific handicapping conditions)

(+ = percentages were calculated by rounding and may not add up to 100%)

TABLE 3

Number of Individuals Participating in Related Service Components by Individual Competition

	COMPETITION					
	84.078C	84.086M	84.158C	84.158L	ALL	TOTAL
PARTICIPANTS	N=32	N=10	N=20	N=8	N=70	N=149
Parents	486	446	1100	340	2372	4689
Secondary teachers	2924	158	792	161	4035	8262
Agency personnel	360	238	402	26	1026	2524
Project Staff	104	50	30	17	201	507
Business/industry personnel	280	70	1196	200	1746	2581
Postsecondary faculty	923		21	5	949	2906
Peer tutors	77	0	0	0	77	124
Undergraduate/graduates	507	0	288	13	808	1143
Other	64	5	177	20	266	1340

N - number of projects reporting actual numbers receiving related services

TABLE 4
Percentage of Projects in Current Competitions Reporting Cooperation with Specific Agencies

	COMPETITION				
AGENCY	84.078C N=22	84.086M N=9	84.158C N=22	84.158L N=9	ALL N=62
Public Secondary School	41	33	32	56	39
Private Secondary School	5	0	9	0	5
Local Education Agency	9	44	36	44	29
Community College	50	0	32	44	35
University	14	11	36	11	21
JTPA Agent	9	33	45	22	27
Residential Institution	0	22	23	11	13
Community Workshop	0	22	36	11	18
Community Education/ Rehabilitation Facility	15	11	23	22	15
Profit Making Agency	29	33	23	33	21
Research Institute	0	11	5	0	3
City/County Government	0	11	18	0	8
State Agency	59	89	64	56	65
Private Non-Profit Agency	9	22	18	0	13
Local ARC	0	33	18	0	11
Local ACLD	18	0	9	11	11
Hospital	0	0	5	0	2
Other	27	44	32	33	32

(N = number of projects reporting)

TABLE 5

Percentage of Projects in Individual Competitions Using Specific Evaluation Approaches

	COMPETITION					
	84.078C	84.086M	84.158C	84.158L	ALL	TOTAL
EVALUATION APPROACH	N=34	N=10	N=22	N=10	N=76	N=160
Systems Analysis	71	80	77	80	75	72
Goal Based	59	50	73	50	61	55
Goal Free	12	30	14	0	13	13
Decision Making	26	20	45	30	32	28
Connoisseurship	0	0	0	0	0	0
Professional Review	35	40	27	20	32	30
Quasi Legal	0	0	0	0	0	0
Case Study	24	30	14	30	32	28

(N = number of projects reporting)

TABLE 6

Percentage of Projects in Individual Competitions Collecting Specific Data/Information

	COMPETITION					
TYPE OF DATA/INFORMATION	84.078C N=33	84.086M N=10	84.158C N=21	84.158L N=10	ALL N=74	TOTAL N=156
Students/Clients Served						
Number referred to project services	82	70	52	70	70	71
Intake/referral information	55	40	38	70	50	54
Number receiving direct services	79	70	81	80	78	81
Student demographics	79	80	71	60	74	81
Student educational background	67	50	43	50	55	58
Student work experience background	67	60	67	50	64	56
Assessment results for student	73	80	48	80	68	71
Student progress in training program	42	10	57	10	62	61
Student integration into environment	27	80	57	50	46	44
Student follow-up status	67	80	33	80	61	73
Student employment status	36	70	71	70	55	69
Student outcome status	48	50	62	70	55	51
Other student information	21	10	10	30	18	17
Employers						
Employer characteristics/ demographics	18	70	48	60	39	41
Employer collaboration level	12	60	29	30	26	22
Level of direct service provided to employer	9	70	43	30	30	33
Employer satisfaction with student	21	70	57	60	43	44
Employer outcome status	6	60	33	40	39	22
Other employer data/information	0	0	10	10	4	6
Postsecondary Education						
Demographics	42	30	38	60	42	40
Collaboration level	27	10	33	40	28	28
Level of direct service provided by project	64	10	38	40	55	40
Satisfaction with student participation, etc.	52	20	24	40	38	28
Outcomes	64	20	33	50	47	36
Other	21	0	5	10	12	10

(N = number of projects reporting)

TABLE 7

Percentage of Projects in Individual Competitions Using Specific Types of Instrumentation

	Competition				
INSTRUMENTS	84.078C N=27	84.086M N=5	84.158C N=8	84.158L N=7	ALL N=47
Commercial					
General ability/intelligence	78	40	75	29	66
Special aptitude	4	20	63	14	17
Vocational skills	22	20	75	43	34
Academic achievement	78	20	75	86	72
Language	26	20	63	14	30
Adaptive behavior/survival skills	19	60	75	14	32
Social skills	15	20	50	57	28
Career interest	52	0	63	71	51
Daily living skills	7	40	50	57	26
Dexterity/manual skills	11	0	50	57	23
Other student assessment	41	60	38	0	36
Local/Project Developed					
Observation forms	29	56	33	13	32
Checklists	45	44	39	25	41
Rating scales	52	44	61	38	52
Interviews	55	33	28	88	48
Surveys	58	44	83	63	64
Questionnaires	32	0	28	38	27
Other	61	78	61	88	67

N - number of projects reporting

Management Plan for Year 4

TASK 6.1: Model Program Evaluation Data Base

Task Manager: Technical Assistance Program Director, TBN

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.1.1	Review analysis of evaluation plans in new project applications	Evaluation Analysis Worksheet	8-22-88	2-1-89	TBN, CH
6.1.2	Maintain and update dBase III files for project directors data base and project characteristics data base	dBase files	8-22-88	ongoing	CH
6.1.3	Review and refine strategy for program data collection	Revised data collection strategy & questionnaires for current & expired projects	9-1-88	10-1-88	TBN, CH
6.1.4	Collect prescribed data and information on all newly funded projects	Completed questionnaire	10-15-88	5-1-89	TBN, CH
6.1.5	Update data and information on all current and expired projects	Updated questionnaire	1-89	5-1-89	TBN, CH
6.1.6	Conduct followup calls/ inquiries	Phone log and memo	3-89	4-89	TBN
6.1.7	Develop individual project profiles	Profile reports	5-1-89	6-30-89	TBN, CH
6.1.8	Develop project group profile	Profile reports	5-1-89	6-30-89	TBN, CH
6.1.9	Develop a compendium of project	Compendium	6-1-89	7-30-89	TBN, CH
6.1.10	Develop graphical profiles of key summary data	Graphic data	6-1-89	7-30-89	TBN, CH

TBN - To be named
CH - Cynthia Hartwell

TASK 6.2: Meta-evaluation

(Dr. Laird Heal)

Overview of Year 4 Activities

In Year 4 the case study project will be expanded to include 50 cases. The additional cases will be obtained from a solicitation of newly funded model demonstration projects and projects from the Illinois Supported Employment Project. Management plans for this task follow.

Early in Year 4, a proposal for a study of the outcomes associated with postsecondary education model demonstration projects will be developed by Drs. Rusch and DeStefano and circulated to the Institute Advisory Committee for feedback. Management plans will accompany that proposal.

Management Plan for Year 4

TASK 6.2: Meta-evaluation

Task Manager: Dr. Laird Heal

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.2.1	Survey newly funded model demonstration projects & ISEP programs	Survey list	9-30-88	11-30-88	LH, DK
6.2.2	Develop educational outcomes proposal	Proposal	9-30-88	10-30-88	LD, FR
6.2.3	Circulate proposal to IAC		10-30-88	12-1-88	LD, FR
6.2.4	Analyze survey data	Preliminary report	11-30-88	1-30-89	LH, DK
6.2.5	Finalize educational study	Proposal outcomes	1-30-89	2-30-89	LD, FR
6.2.6	Prepare article for publication	Article	1-30-89	5-30-89	LH

LH - Dr. Laird Heal
DK - Dianne Kovacs
LD - Dr. Lizanne DeStefano
FR - Dr. Frank Rusch

TASK 6.2 (continued): Enduring Qualities, Persistent Projects: Characteristics of Projects that Endure after Federal Funding Ceases

(Drs. Frank Rusch and Lizanne DeStefano)

The 1984 fiscal year marked the beginning of a federal effort to focus on the problems with youth with handicaps in secondary schools in order to provide appropriate services to assist with the transition from school to work. Pursuant to this goal, the Office of Special Education and Rehabilitative Services (OSERS) announced several grant programs in that year. Similar funding was also authorized under Section 641 - 642 of P.L. 98-199, Secondary Education and Transitional Services for Handicapped Youth of 1973, as amended in 1983, which was enacted for the purpose of stimulating a nationwide transition initiative.

In August 1985, the Secondary Transition Intervention Effectiveness Institute at the University of Illinois at Urbana-Champaign (Transition Institute) was established to assist in evaluating and extending the impact of the federal initiative. A five-year contract with OSERS is enabling the Transition Institute to study the issues and problems related to secondary education and transitional services. One major activity of the Transition Institute is to collect, summarize, and disseminate information about the model transition projects funded under the grant programs mentioned above.

Diverse types of model projects in many communities throughout the United States have been granted funding. (On January 1, 1987, there were 120 active OSERS funded transition projects.) Much expertise, manpower, time, and resources--not to mention taxpayers' money--have been expended to initiate and maintain projects. The normal period of funding to model projects is between one and three years. An enormous amount of knowledge and expertise must be acquired by project personnel immediately before and during the time funding is in operation. (Even projects that do not succeed in reaching their goals must generate some insights into what works and what does not.) It would, therefore, seem a waste of resources and knowledge if projects should expire without leaving some record of the insights gained by project personnel. Of course some projects do survive when funding has ceased; these projects must be regarded as having some special ingredient not possessed by the others.

Little is know presently of what happens to projects when funding ceases or why some projects continue while others do not. Our research is aimed at redressing this lack of knowledge by determining which characteristics are pivotal in the continuation of projects after federal funding has expired and recording the impressions of the contact person at the project about why that particular project survived. The thrust of our inquiry is threefold: (a) the construction of a data matrix of variables describing project characteristics, (b) the administration of a questionnaire to a sample of contact people in projects no longer federally funded but still in operation, asking, among other questions, their impressions of why their project succeeded in staying operational, and (c) the description of surviving project profiles.

This procedure will enable us to examine the hard facts of survival and compare these with the impressions of project coordinators about why their project is still in operation.

By providing information on which factors were pivotal in project continuation, this research will offer crucial insights to funding agencies, enabling them to be more discerning in choosing projects to fund. From another perspective, the information gained by this research will help initiators of model projects to examine critically the factors they plan to include in their projects in light of what is shown to work.

The Data

The data will include extant information on projects in a data base at the Transition Institute. Another source of available data is that from a questionnaire, sent to projects whose funding had expired, requesting such information as which project components, if any, were being continued or replicated by other agencies. Available information from the data base consists of:

1. Demographic information, such as length of time the project was funded, start and end dates, and type of geographic area served.
2. Detailed descriptions of projects, including their purpose, focus of activities throughout the funding period, type of grantee, and types of cooperating agencies/organizations.
3. Types of project products (e.g., newsletters, brochures).
4. Client profiles, giving number of project clients and demographic data, including handicapping conditions of these clients.
5. Related service components, that is, the number of individuals receiving direct services through project activities--for example parents and project staff.
6. Project evaluation data--which types of evaluation, if any, were used by projects during the course of their funding.

The Expired Project Characteristics Questionnaire was sent to all projects whose funding had expired. It requested information on: (a) whether the project had continued after expiration of federal funding, (b) the name, address, and telephone number of the contact person within the organization, and (c) a description of what project components are being continued b the existing project or replicated by other organizations.

We will use components of this questionnaire to describe qualitatively the profiles of what we call "Persistent Projects."

Method

Construction of a Data Matrix and Its Analysis

The first step in the analysis will be the formulation of numerical coding of the textual information contained in the Transition Institute's Project Profiles data base. The Expired Project Characteristics Questionnaire will be used to identify projects still in operation after cessation of federal funding.

When this task is completed and the data entered, we propose using stepwise discriminant analysis to identify factors that influence the continuation process. Because approximately 75% of the variables available for analysis are nominal/binary, it will also be necessary to use split sample analysis to check on reliability.

Tatsuoka (1970, p. 1) notes, "When two or more groups are compared in terms of many variables it is of interest not only to see if they differ significantly from one another but, if they do differ, also to understand the nature of their differences" (see also Klecka, 1980). This type of comparison will be the object of our data analysis.

Questionnaire to Continuing Projects' Contact Persons

A 20% sample of contact persons in projects still operational after cessation of federal funding will be randomly selected. We will develop an open-ended questionnaire in consultation with the Survey Research Lab of the University of Illinois at Urbana-Champaign. We envisage this questionnaire as suitable for telephone administration in order to determine what these key people regard as crucial to the continuation of their particular model projects.

After we have analyzed these qualitative data using TEXTPACK V, we will formulate a more traditional questionnaire for future use with projects that continue after funding has ceased.

Expired Project Characteristics Questionnaire

Using qualitative data analysis techniques, we will describe the characteristics of projects that have survived after the cessation of federal funding.

References

Klecka, W. R. (1980). Discriminant analysis. Sage University Paper series on Quantitative Applications in the Social Sciences, No. 19. Newbury Park, PA: Sage.

Tatsuoka, M. M. (1970). Discriminant analysis. Selected topics in advanced statistics: An elementary approach. No. 6. Champaign, IL: Institute for Personality and Ability Testing.

Variables Available for Discriminant Analysis of Persistent Projects Study

Description of Variable	Level of Measurement
Identification	Identity number
Length of time project was funded	Ratio
Amount of funding	Ratio
Geographic region by size of population served	Ordinal
Project purpose	Nominal
Primary grantee	Nominal, binary, uncorrelated (e.g., High School--yes/no)
Cooperating agency	Nominal, binary, uncorrelated (e.g., local education agency--yes/no)
Project products	Nominal, binary, uncorrelated (e.g., newsletter--yes/no)
Number of clients served	Ratio
Handicapping conditions of clients	Ordinal
Age range of clients	Ratio
Number of people receiving direct training	Ratio
Evaluation procedures	Nominal, binary, uncorrelated (e.g., collection of data on numbers referred to project services--yes/no)
Evaluation instruments	Nominal, binary, uncorrelated (e.g., use of aptitude tests--yes/no)

Management Plan for Year 4

TASK 6.2: Enduring Qualities, Persistent Projects: Characteristics of Projects that Endure after Federal Funding Ceases

Task Managers: Drs. Frank Rusch and Lizanne DeStefano

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.2.1	Construct coding scheme for data on data base	Coding scheme	6-1-88	7-1-88	FR, LD
6.2.2	Construct a pilot telephone assisted questionnaire to be administered to contact person/executive of model program	Pilot questionnaire	6-1-88	7-1-88	FR, LD
6.2.3	Code, enter, and analyze data from data base	Data set	7-1-88	9-1-88	FR, LD, GRA
6.2.4	Select a 5% sample of contact persons/executive officers	Sample list	7-1-88	8-1-88	FR, LD, GRA
6.2.5	Contact persons on sample list and arrange for interviews to take place	List of dates and times	8-1-88	8-15-88	FR, LD
6.2.6	Interview persons on list, code, enter, and analyze	Transcribed and coded interviews; Date set	8-15-88	10-1-88	FR, LD, GRA
6.2.7	Write report using both data sets, comparing perceptions of contact persons with results of stepwise multiple regression	Report	10-1-88	1-1-89	FR, LD, GRA

FR - Dr. Frank Rusch
LD - Dr. Lizanne DeStefano
GRA - Graduate research assistant

TASK 6.3: Student Assessment

(Dr. Lizanne DeStefano)

Overview of Year 4 Activities

In Years 1 and 2, the primary activity associated with this task was the review of current assessment practices in the model demonstration projects. This review was published in two volumes, Review of Student Assessment Instruments and Practices, Vols. I & II. These volumes have been extremely popular; over 600 copies have been disseminated to date. Because of the consistency of findings between Years 1 and 2, in Year 3 it was decided to incorporate the survey into the Project Characteristics Questionnaire and to shift the attention of the principal investigator toward the development of alternate means of assessment. One such endeavor has been the development of the Employment Integration Index. This instrument currently is being pilot tested in the state of Illinois.

Since previous surveying has focused upon commercially available standardized assessment, Year 4 activity will emphasize informal assessment techniques used by the model demonstration projects. An attempt was made to do this in Year 1, and although many projects had intentions to develop instrumentation, little progress had been made in that area. Two years later, we hope to have a more fruitful search. Instruments and procedures developed by the projects will be reviewed in a manner similar to the one used in Vols. I & II. A third monograph containing these reviews will be produced.

Management Plan for Year 4

TASK 6.3: Student Assessment

Task Manager: Dr. Lizanne DeStefano

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.3.1	Develop survey for informal assessment practices	Survey	8-20-88	10-15-88	LD, GRA
6.3.2	Develop list of past and current model demonstration projects to be surveyed	List	8-20-88	10-15-88	GRA
6.3.3	Mail survey	Mailing list	10-15-88	12-1-88	GRA
6.3.4	Develop review format	Format	10-15-88	1-15-89	LD, GRA
6.3.5	Review instruments/procedures received	Reviews	1-15-89	5-30-89	GRA
6.3.6	Summarize findings	Paper	5-30-89	8-20-89	LD, GRA
6.3.7	Prepare monograph	Monograph	5-30-89	8-20-89	LD, GRA

LD - Dr. Lizanne DeStefano
GRA - Graduate Research Assistant

TASK 6.4: Analysis of Extant Data Sets

(Dr. Delwyn Harnisch)

Overview of Year 4 Activities

Secondary analysis. Year 4 will continue with the evaluation of the relationships between independent living and individual and school-related factors. Primary emphasis will be placed on a longitudinal perspective to examine further the relationships of these variables over the transition years from high school to post-high school years.

As has been the case, the employment and independent living outcomes of youth with handicaps will form the target group of our analyses. With the fourth wave of High School and Beyond (HSB) data becoming available later this summer on a distribution basis, we will be able to followup on the previous findings in these outcome areas and examine how they are related to the young adult experiences of our longitudinal sample. Thus, the questions focusing on employment status, type of jobs, income and benefits, promotion, and job security will be addressed with reference to the initial findings in both the Transition Literature Review and the Digest.

In conducting these analyses, the primary focus will be on the differences in educational achievements, employment, and independent living that occur with specific handicapping conditions. Specific emphasis will be placed on those youth with learning disabilities in order to examine how these disabilities in school are related to employment outcomes after the high school experiences. Similarly, we will use specific handicapping conditions to study the differential independent living outcomes and quality of life measures that are exhibited in the fourth wave of the HSB data.

A specific target group of our research will be on those students with handicaps who drop out of high school. Graduation from high school has been found to be a significant predictor of positive outcomes in employment and independent living. However, the retention rates for many people with handicaps are relatively low. Thus, those with handicaps may be facing the compounding effect of the specific condition and inadequate education in their transition into adult life.

In the study of dropouts, we will have access to data from the Annual Reports to Congress on compliance with P.L. 94-142 as well as identifying other data sources. This access will facilitate the study of retention rates among the states as well as by the specific handicapping conditions. We plan to study how certain conditions vary from others in retention rates, what impact this has on employment and independent living outcomes, and variations in rates among various states, and we will continue to investigate the apparent similarities that have emerged by graduation status rather than between the presence or absence of a handicapping condition.

Literature review. Articles will continue to be collected for inclusion in the Transition Literature Review. We will conduct comprehensive searches and will tap as many diverse sources as possible, with special emphases on conference proceedings and any research that may have been commissioned by associations that focus on specific handicapping conditions. The focus of the Transition Literature Review (Volume 3) will remain on empirical studies that examine various aspects of employment, educational, or independent living outcomes.

The 1988 edition of the literature review will report on the research articles in relation to their outcome focus and will include a new chapter that will examine the quality of the research articles and analyze the various research methodologies. This is being undertaken as an attempt to assist readers in the synthesis of these research articles and a review of the cautions to be remembered when using certain methodologies approaches.

Furthermore, we are planning to produce the annotated bibliography on diskette for easier distribution to interested readers. To facilitate the use of the computer files, a manual will be written for inclusion in the _Transition Literature Review_ and for separate distribution with diskettes. In the preparation of the _Transitional Literature Review_, we will include only the full annotations for each reviewed article added to the database along with the citation, outcome area, and handicapping conditions examined.

Management Plan for Year 4

TASK 6.4: Analysis of Extant Data Sets

Task Manager: Dr. Delwyn Harnisch

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.4.1	Review extant federal and state data sources on educational, employment, and independent living	Review	9-1-88	7-15-89	GRA
6.4.2	Update digest of selected current data on education and employment outcomes and independent living arrangements for youth with handicaps	Draft *Digest*	9-1-88	5-30-89	DH, GRA
6.4.3	Update data base containing relevant literature	Data base	9-1-88	6-30-89	DH, GRA
6.4.4	Synthesize Year 3 findings into articles and conference presentations	Articles and presentations	9-1-88	6-30-89	DH, GRA
6.4.5	Revise, publish, and disseminate *Digest*	*Digest*	5-30-89	7-15-89	DH, GRA

DH - Dr. Delwyn Harnisch
GRA - Graduate research assistant

TASK 6.5: Research on Evaluation Approaches

(Dr. Robert Stake)

Summary of Year 3 Activities

The purpose of Task 6.5 is to study program evaluation in the context of transition projects in order to suggest modifications in evaluation requirements, expectations, and procedures. Year 3 work has been a continuation of the research programs undertaken in 1985 on the evaluation processes. During this third year 1987-88, our work concentrated on applying the evaluation ideas studied in the first two years. Seven ideas identified in Year 1 were developed through case study and survey in Year 2. Particular attention was given to differences in what is valued in the model program and what is emphasized in the evaluation of the model program.

The following is a restatement of the seven issues questions pursued.

1. How do model program accomplishments valued at the local level differ from accomplishments indicated in the model program federal evaluation reports?
2. What would people associated with a transition model program look for in a good evaluation report?
3. What goals other than the formally stated goals are model program personnel pursuing?
4. How does technical assistance change perception of model program goals and standards of success?
5. To what extent are model program personnel using formal evaluation approaches and formal statements of evaluation standards?

6. Are the reasons that employers of transition students participate in transition model programs highly compatible with making a profit? If not, what are those reasons?
7. How do ethnic parents from outside the school leadership culture perceive the goals and practices of transition model programs?

For the conceptual examination of these questions see the Transition Institute monograph, "Issues in Research on Evaluation in Transition," 1987.

The work of Year 3 has been to develop a program evaluation activity suited to the needs of projects as represented by the eight questions above and is manifest in case studies and project directors' views surveyed.

Case studies. Three sites were studied in depth: the Santa Barbara Transition Project; Gray's Harbor Transition Project of Aberdeen, Washington; and Danville, Illinois. Visits were made to additional sites as well. A report on these case studies has been published and is available from the University of Illinois Transition Institute.

Our Santa Barabara study was oriented to perceptions of success in dealing with the community and with other agencies responsible for education and employment of youth. A strong ethnographic orientation was assumed in order to recognize differences in values and differences in perception about what was occurring. Minority groups were found to require extra staff time and special arrangements, factors seldom examined closely in evaluation reports.

The Gray's Harbor project drew attention to the role of the outside evaluator both in record keeping of student accomplishment and in technical assistance for program management. Problems studied were those delaying original start-up, project collaboration with the school-system-based regional service center, and role of a profit-making business as a catalyst to agency transition activity. It was noted that the project's outside evaluator was underfunded and too seldom present to assist in regular review of operating policies.

The Danville project was based on observations of staff work with youngsters placed in community employment, especially as that staff work was oriented to responsibilities shared by other agencies in the community. Federal support was available for technical assistance. Perceptions of success of that assistance were given special attention. Efforts to obtain even minimum interagency agreement were seen to be undervalued by program evaluation efforts.

At Long Island's Project READDY, we examined views of success by employers and students. Here we became well acquainted with placement of youth with severe handicaps. One phenomenon observed was smooth transition of training/placement from a university-based project to an existing private institution. Particularly of interest were emphases on training of graduate student employment supervisors and of task analysis of work assignments for the special needs population. This study was used as background for the other three and did not culminate in a report of its own.

Survey. Starting in Year 2, an attempt was made to obtain local perception of the extent to which issues identified in Year 1 were present at the local level and to assess their impact on the activities and attitudes of project staff members. A four-page mail questionnaire designed to obtain information on each issue was sent to 104 project directors. Eighty-four completed questionnaires were returned and during the fall of 1987, the responses were analyzed. A report was prepared and should be available form the Institute office during the summer of 1988.

Responses to the questionnaire indicated widespread acknowledgment of changes in goals and activities from the time of proposal writing until the time of writing the final report, and further that the evaluation procedures traditionally associated with federal projects are not sensitive to those changes. A need was expressed for emendations to evaluation design that allow for review of alternative goals and intermediate outcomes.

Development of a management diary. Concentrated effort was given during Year 3 to the development of evaluation methods to meet the need just mentioned. Emphasis was given to techniques for improving evaluation plans to accommodate ongoing changes in aim and project activity. It was decided that "self study" would be the most practical and radical approach. A form of management diary was developed to assist project directors in acknowledging and working through changes. The purpose of our prototypic "Project Director's Evaluation Diary" is to encourage self-evaluation by Transition Project managers with periodic formal acknowledgment of project parameters and problems.

The intent was to have project directors spend about 30 minutes at the end of each month using the evaluation diary procedure to review both progress and setback during the month. Ideally, another project director would serve a auditor of the review.

Piloting of the evaluation diary was arranged with three grantees:

1. Virginia Department of Education
2. Whittier Union High School District
3. University of Minnesota

Each of these projects differs, in geographic location, in project aim, and institutional setting. A brief description of each project follows.

Virginia. The title of this project is "Project VAST." The primary grantee is a state education agency. The purpose of the project is to develop a model at state and local levels which ensures that students with disabilities in Virginia will receive transition services through a formal organized case management system. The model involves 10 state agencies and a computerized transition information system. Transition services focus on career preparation, employment, independence, and successful life adjustment. The target population receiving direct services are 240 youth from age 16 to 22 with a wide array of handicapping conditions. The project began in October 1986 and will end in September 1989.

Whittier, California. The title of this project is "Transition Skills Development for Severely Handicapped." The primary grantee is a local education agency. The purpose of the project is to design, implement, evaluate, and disseminate innovative methods for the provision of transition skills training to individuals with severe handicaps. The target population receiving direct services are 24 students from ages 5 to 22 with severe/profound multiple handicaps. The project began in January 1986 and will end in December 1988.

Minnesota. The title of this project is "Secondary/Post-secondary Transition Grant for LD Youth." The primary grantee is a university. The purpose of the project is to gather information on LD juniors as they make a transition to post-secondary settings, to provide information for service providers of LD individuals, to try out a service delivery model, to develop materials or strategies for facilitating transition for secondary or post-secondary LD populations, and to write and review professional literature pertaining to transition for LD individuals. The target population for direct services is approximately 70 LD adolescents and adults. The project began in September 1986 and will end in August 1989.

Year 3 Product

A report of the findings from the directors' questionnaire described above is being prepared by the Transition Institute. Its working title is "Changes in Aim and Activity of Model Transition Projects: Implications for Evaluation."

Graduate Student Involvement

David Metzer, a doctoral candidate in educational psychology assigned .25 time during the fall semester, analyzed survey data. Use of a half-time graduate assistant is anticipated during 1988-89.

Overview of Year 4 Activities

Continuing the purpose of studying and redeveloping certain aspects of project evaluation, data gather late in Year 3 from field trials are to be analyzed. Revisions or replacement of the diary will be considered. A major field trial is to be carried out. The abiding aim is to assist OSERS in improving evaluation requirements, expectations, and procedures so that the work of those who evaluate contributes maximally to program quality.

Culminating the research of the four-year period, Task 6.5 in Year 4 will orient to (a) discrepancies between what is valued in special education transition practice at the model-program level and the values called forth in present exercise of formal evaluation responsibility at that level, (b) changes in project operations that need to be included in assessing the quality of project changes in project operations that need to be included in assessing the quality of project accomplishment, (c) the institutional, professional, and community contexts of the project, and (d) the commitment of model projects to serve distant and future users of the operations being carried out.

In Year 4 no further survey of the evaluation literature is intended. Activities during Year 4 will focus on the trial and refinement of the alternative evaluation approach mentioned above. It is hoped that all projects funded in a single competition can be enlisted for trying out the evaluation supplement. Data will be collected and a report prepared.

Management Plan for Year 4

TASK 6.5: Research on Evaluation Approaches

Task Manager: Dr. Robert E. Stake

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
6.5.1	Review Year 3 data	Notes	9-1-88	10-15-88	RS, GRA1, GRA2
6.5.2	Modify diary/approach	Instrument	9-1-88	10-1-88	RS, GRA1
6.5.3	Arrange field trial	Schemata	9-1-88	11-1-88	RS, GRA1
6.5.4	Observe field sites	Notes	10-1-88	4-1-89	RS, GRA1, GRA2
6.5.5	Gather data on use	Instrument	11-1-88	6-1-89	RS, GRA1, GRA2
6.5.6	Analyze data	Spreadsheet	6-1-89	8-1-89	RS, GRA1
6.5.7	Prepare report	Report	7-1-89	9-1-89	RS, GRA1

RS - Robert Stake
GRA1 - Graduate research assistant 1
GRA2 - Graduate research assistant 2

TASK 7: Experience for Graduate Students

(Drs. Frank R. Rusch and Lizanne DeStefano)

Summary of Year 3 Activities

During months 25-35 of the contract, 21 graduate students were assigned to various tasks associated with the Institute. Each objective manager is responsible for advertising, interviewing, and assigning his or her own students to activities. Table 7.1 presents information about graduate students by semester and task assignment, including each student's supervisor and percentage of appointment (FTE).

Task managers follow College of Education annual review procedures for each student. To complete this task, during the final week of spring semester, objective managers were asked to complete an evaluation form on each student assigned to their task. The evaluation form requested information about activities assigned to the graduate student, quality of performance, and suggestions for improving graduate student experience at the Institute.

According to the task manager report, graduate students were involved in a wide variety of activities that included conducting computer searches, reviewing and synthesizing literature, planning research activities, collecting data, managing data bases, performing statistical analysis, and writing and editing reports. In all cases task managers reported that they were satisfied with the quality of graduate student performance. It was suggested that a seminar miniseries should be organized to create an opportunity for graduate students to share research and analysis questions.

During the same time period, graduate students were asked to complete an evaluation of their experiences with the Institute. Their evaluation form paralleled that for the objective manager; it asked graduate students to describe their activities associated with the Institute, to rate the quality of supervision, and to offer suggestions for the improvement of graduate student experience.

Graduate students' descriptions of their activities were identical to those of their managers. Graduate students reported a high degree of satisfaction with their experiences and the supervision they received during their appointment with the Institute. It was suggested that responsibilities should be well defined and that the goals of the project should be made clear to the graduate student upon appointment. For those students in areas other than special education, it was suggested that a reading list be prepared to familiarize them with the area of transition. Graduate students expressed a desire for greater involvement in presenting and planning at monthly Institute meetings. Finally, it was requested that all graduate students routinely receive copies of all Institute publications.

Overview of Year 4 Activities

During the fourth year of operation, graduate students will be assigned to tasks according to Table 7.2.

The procedures used to recruit applicants will remain the same as those in Years 1 through 3 (see Management Plan). Specifically, a job announcement will be developed by a task manager and submitted to the Director. The Director will review these announcements and circulate them to all appropriate departments on campus and will list them in Illini Week, a campus publication.

Management Plan for Year 4

TASK 7: Experience for Graduate Students

Task Managers: Drs. Frank Rusch and Lizanne DeStefano

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
7.1	Select students and assign to task managers	List of students by tasks	8-21-88	ongoing	FR, LD, TM CD
7.2	Notify all applicants of their status	Letters	8-21-88	ongoing	FR, LD, TM, CD
7.3	Review and evaluate students' work on tasks	Evaluation	5-21-89	ongoing	FR, LD, TM, CD

FR - Dr. Frank Rusch
LD - Dr. Lizanne DeStefano
TM - Task Manager
CD - Cindy Dobbs

Table 7.1. Reported and Actual Work

Task	Supervisor	Fall	Spring	Summer
1	Leach	Harmon (.50)	Harmon (.50)	Harmon (.50)
2	None	-	-	-
3	None	-	-	-
4.1	Chadsey-Rusch	Haim (.50) Hirohata (.50)	Haim (.50) Hirohata (.50)	Haim (.25) Collet-Klingenberg (.50)
4.2	Rusch	Hughes (.50) McNair (.25)	Hughes (.50) McNair (.25)	Hughes (.50) McNair (.25) (.50)
4.3	Lundstrom	Hook (.50) McNair (.25)	Hood (.50) McNair (.25)	McNair (.25) Haim (.25)
4.4	Schutz	Ellis (.50)	Ellis (.25)	-
4.5	Renzaglia	Gray (.25) Hutchins (.25)	Gray (.50)	Gray (.50)
4.6	DeStefano	Snauwaert (.50)	Snauwaert (.50)	Snauwaert (.50)
5	Dowling	Metzer (.25) Palermou (.25)	Metzer (.25) Palermou (.25)	Metzer (.25) Fehling (.25)
6.1	None	-	-	-
6.2	Heal	Haney (.50)	Kovacs (.50)	Kovacs (.50)
6.3	DeStefano	Liu (.25)	Liu (.25)	-
6.4	Harnisch	Fisher (.25) Tu (.25)	Fisher (.25) Tu (.25)	Fisher (.50) Tu (.50)
6.5	Stake	Bergin (.25)	Bergin (.25)	Theobald (.50)
7	None	-	-	-
8	None	-	-	-

Table 7.2. Projected Graduate Student Assignments for Months 36 through 47

Task	Supervisor	Fall	Spring	Summer
1	Leach	Harmon (.50)	Harmon (.50)	Harmon (.50)
2	None	-	-	-
3	None	-	-	-
4.1	Chadsey-Rusch	Collet-Klingenberg (.50)	Collet-Klingenberg (.50)	Collet-Klingenberg (.50)
4.2	Rusch	Hughes (.50) McNair (.25)	Hughes (.50)	Hughes (.50)
4.4	Lundstrom	.5 TBN	.5 TBN	.5 TBN
4.5	Renzaglia	.5 TBN	.5 TBN	.5 TBN
4.6	DeStefano	Snauwaert (.50)	Snauwaert (.50)	Snauwaert (.50)
5	TBN	.5 TBN	.5 TBN	.5 TBN
6.1	TBN	-	-	-
6.2	Heal	.5 TBN	.5 TBN	.5 TBN
6.3	DeStefano	.5 TBN	.5 TBN	.5 TBN
6.4	Harnisch	.5 TBN	.5 TBN	.5 TBN
6.5	Stake	.5 TBN	.5 TBN	.5 TBN
7	Rusch/DeStefano	-	-	-
8	Rusch	-	-	-

TBN - To be named

Task 4.3: Completed

TASK 8: Performance Measurement System

(Dr. Frank R. Rusch)

Summary of Year 3 Activities

The performance measurement system of the Institute is designed to provide formative and summative evaluation of Institute activities and products. Formative evaluations are attained through our monthly reporting system; a copy of the form follows. Each month all objective managers are responsible for documenting all tasks completed in the preceding month, tasks continued, tasks begun, and slippages. Reasons for the slippages and action(s) needed and taken are documented on the monthly report.

During the past year there were no major slippages. There were a number of minor activity delays, but these delays did not result in our failure to meet production deadlines.

Table 8.1 overviews faculty assignments for 1988-89 (months 36 through 98). Note that the table also points to previously reported assignments if a discrepancy existed.

The following persons served on the Institute Advisory Committee during Year 3:

Dianne E. Berkell, Ph.D., Long Island University - C.W. Post Center
Dan Hulbert, Whittier (CA) Union High School District
Gary Lambour, Ph.D., Connecticut State Department of Education
Robert L. Linn, Ph.D., University of Colorado - Boulder
Dennis Mithaug, Ph.D., University of Colorado - Colorado Springs
Jeri Nowakowski, Ph.D., Northern Illinois University
Nick L. Smith, Ph.D., Syracuse University
Carl Suter, Governor's Planning Council on Developmental Disabilities
Craig Thornton, Ph.D., Mathematica Policy Research
Ann Turnbull, Ph.D., Joseph P. Kennedy, Jr. Foundation
Timm Vogelsburg, Ph.D., Temple University
Paul Wehman, Ph.D., Virginia Commonwealth University
Claude Whitehead, Washington, D.C.
Russell Zwoyer, University of Illinois at Urbana-Champaign

Task 8

MONTHLY REPORTING FORM
(due on the 10th of each month)

Task: ____________________

Month: 11 13 14 15 16 17 18 19 20 21 22 23 25
(Circle one)

Objective (e.g, 4.1, 6.1, 6.2): ____________________

Objective Manager: ____________________

		FTE
Faculty/Staff	1.	
	2.	
	3.	

	Date of Initiation	Date of Completion	Products/ Outcomes
Tasks completed in prior months:			
Tasks continued this month:			
Tasks to be continued next month:			
Slippages (state reasons and action needed/taken):			

Notes:

Return to: Cindy Dobbs
Com Annex

Most of these members attended the Project Directors' Third Annual Meeting. At this meeting all products were reviewed by the Committee, and a complete overview of the performance of the Institute was made.

A new Advisory Board was named for Year 4. This board was composed of incumbent members and new appointees. The following persons serve on the Institute Advisory Committee for Year 4:

Dianne Berkell, Ph.D., Long Island University
Dan Hulbert, Whittier (CA) Union High School District
Gary Lambour, Ph.D., Connecticut State Department of Education
Joel Levy, Young Adult Institute, New York
Robert L. Linn, Ph.D., University of Colorado - Boulder
Dennis Mithaug, University of Colorado - Colorado Springs
Jeri Nowakowski, Ph.D., Northern Illinois University
Nick L. Smith, Ph.D., Syracuse University
Carl Suter, Governor's Planning Council on Developmental Disabilities
Craig Thornton, Ph.D., Mathematica Policy Research
Ann Turnbull, Ph.D., Joseph P. Kennedy, Jr. Foundation
Timm Vogelsburg, Ph.D., Temple University
Paul Wehman, Ph.D., Virginia Commonwealth University
Claude Whitehead, Washington, D.C.
Russell Zwoyer, University of Illinois at Urbana-Champaign

Overview of Year 4 Activities

The primary formative activities of Task 8 will center around the monthly administrative report, quarterly financial reports, and the Annual Report. The monthly administrative report will focus upon activities undertaken to meet performance and product deadlines.

A formal summative evaluation of the Institute will continued throughout Year 4. Drs. Rusch and DeStefano will organize panels of external reviewers to assist in the formal assessment of the Institute's products. The review panels will consist primarily of Institute Advisory Committee members and will be selected to represent diverse audiences.

Management Plan for Year 4

TASK 8: Performance Measurement System

Task Managers: Drs. Frank Rusch and Lizanne DeStefano

	Activity	Product	Date of Initiation	Date of Completion	Personnel Involvement
8.1	Send Monthly Reporting Form to all task managers	Monthly Reporting Form	5th of each month	10th of each month	CD, TM
8.2	Collect and summarize Monthly Reporting Forms into Monthly Administrative Report	Monthly Administrative Report	10th of each month	15th of each month	FR, CD
8.3	Submit Quarterly Financial Report (HEW Form 646)	Form 646	quarterly	quarterly	G&C
8.4	Select panel members for expert review	Panel list	10-1-88	12-15-88	FR, LD, IS
8.5	Organize panel review meeting	Meeting agenda	10-1-88	2-7-89	FR, LD, CD
8.6	Conduct panel review meeting	Meeting notes	2-1-89	3-30-89	FR, LD, IS
8.7	Disseminate evaluation report to advisory board and others	Evaluation report	4-1-89	5-1-89	FR, LD, CD
8.8	Submit products to Project Officer	Products	ongoing	ongoing	FR, CD
8.9	Submit Annual Report	Annual Report	month __	month __	FR, IS

CD - Cindy Dobbs
TM - Task Manager
FR - Dr. Frank Rusch
LD - Dr. Lizanne DeStefano
G&C - Grants and Contracts Office, U of I
IS - Institute Staff

Table 8.1. Projected Institute Faculty, Task Assignment and Full Time Equivalent for Months 37 through 48

Task	Fall	Spring	Summer
1	Leach (.50)	Leach (.50)	Leach (.50)
2	TBN (.25)	TBN (.25)	TBN (.25)
3	Levy (.25)	Levy (.25)	Levy (.25)
4 Administration	Rusch (.20)	Rusch (.20)	Rusch (.20)
4.1	Chadsey-Rusch (.25)	Chadsey-Rusch (.25)	Chadsey-Rusch (.25)
4.2	Rusch (.50)[1]	Rusch (.50)	Rusch (.50)
4.4	Lundstrom (.50)	Lundstrom (.50)	Lundstrom (.50)
4.5	Renzaglia (.25)	Renzaglia (.25)	Renzaglia (.25)
4.6	DeStefano (.25)	DeStefano (.25)	DeStefano (.25)
5	TBN (.75) TBN (.75)[3]	TBN (.75) TBN (.75)	TBN (.75) TBN (.75)
5 Administration	DeStefano (.50)	DeStefano (.50))	DeStefano (.50)
6.1	TBN (.25) TBN (.25)	TBN (.25) TBN (.25)	TBN (.25) TBN (.25)
6.2	Heal (.25)[2]	Heal (.25)[2]	Heal (.50)
6.3	DeStefano (.25)	DeStefano (.25)	DeStefano (.25)
6.4	Harnisch (.25)	Harnisch (.25)	Harnisch (1.0)
6.5	Stake (.10)	Stake (.10)	Stake (.10)
7	Rusch/DeStefano	Rusch/DeStefano	Rusch/DeStefano
8	Dobbs (1.0)[3] Nichols (1.0)[3] Hourly[4]	Dobbs (1.0)[3] Nichols (1.0)[3] Hourly[4]	Dobbs (1.0)[3] Nichols (1.0)[3] Hourly[4]

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[1] Includes administrative responsibilities for 4.0 (.25), 7 (.05), and 8 (.15)

[2] Contributed

[3] Includes responsibilities associated with all tasks

[4] Distributed on an as-needed basis throughout period

Task 4.3: Completed

Research Faculty at the University of Illinois

Janis Chadsey-Rusch
Assistant Professor of
Special Education

Lizanne DeStefano
Assistant Professor of
Educational Psychology

Delwyn L. Harnisch
Associate Professor of
Educational Psychology

Laird W. Heal
Professor of Special
Education

Francesca Lundström
Assistant Professor of
Special Education

L. Allen Phelps
Professor of Vocational
Education

Adelle M. Renzaglia
Associate Professor of
Special Education

Frank R. Rusch
Professor of Special
Education

Robert E. Stake
Professor of Educational
Psychology

Institute Advisory Committee

University of Illinois at Urbana-Champaign

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Long Island University
C.W. Post Center

Dan Hulbert
Career Assessment and
Placement Center
Whittier (CA) Union High
School District

Gary Lambour, Ph.D.
Special Education Consultant
Connecticut State Department
of Education

Joel Levy, Ph.D.
Young Adult Institute
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Robert L. Linn, Ph.D.
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Princeton, New Jersey

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Joseph P. Kennedy, Jr., Foundation
Washington, D.C.

Timm Vogelsberg, Ph.D.
Developmental Disabilities Center
Temple University

Paul Wehman, Ph.D.
Rehabilitation Research
and Training Center
Virginia Commonwealth University

Claude Whitehead
Employment Related
Services Associates
Washington, D.C.

Russell Zwoyer
Associate Dean for Research
College of Education
University of Illinois at
Urbana-Champaign

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